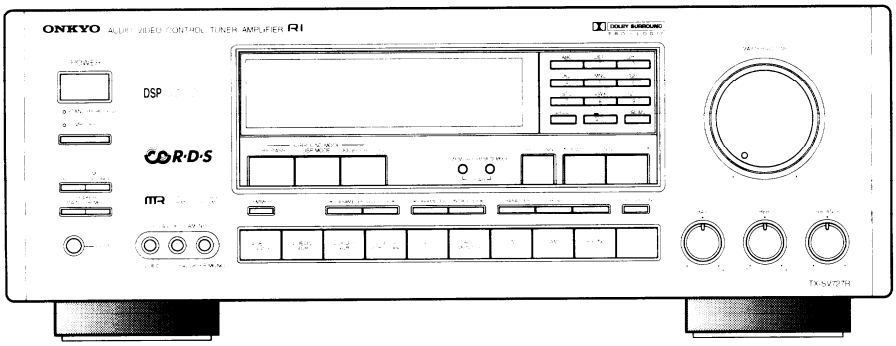
Artistry in Sound

ONKYO®

Audio Video Control Tuner Amplifier

TX-SV727
TX-SV727R

Instruction Manual



CONTENTS

Precautions 4
Supplied accessories 4
Explanation 5
Before using this unit 6
Speaker placement 7
Control positions and names 8
Remote Control 9
Making system connections 10
Making speakers connections 13
Making antenna connections 14
Connection for Multiple Room Remote Control 16
Learning remote control codes using the 10 programmable buttons 18
Using the On-screen display function 20
Listening to your favourite source 22
Using the tuner 24
Receiving RDS (TX-SV727R only) 26
Entering station names (TX-SV727R only) 28
Recording a source 29
Basic operation of Surround play 32
Use of surround mode 33
The Parameter selector 33
Setting the surround parameters 35
Listening to devices connected to the TX-SV727/R in another room 40
Trouble shooting guide 42
Specifications 44

Thank you for your purchase of the Onkyo A/V Tuner Amplifier.
Please read this manual thoroughly before making connections and turning on the power.
Following the instructions in this manual will enable you to obtain optimum performance and listening enjoyment from your new A/V Tuner Amplifier.
Please retain this manual for future reference.

Features

■ Powerful A/V Receiver with Discrete Output

Plenty of pristine power drives your home theater system to perfection. In surround mode you get 80 watts per channel (8 ohm) to your front L/R and center speakers, plus 25 watts per channel to your L/R surround speakers. Stereo mode: 100 watts per channel (8 ohm). Discrete output stage circuitry for all channels and heavy-duty power supplies help the TX-SV727/R excel at driving accurately the most demanding low-impedance speakers.

■ Dolby Pro Logic & 4 Digital Soundfields

In addition to fully digital Dolby Pro Logic (for the most accurate surround sound), the TX-SV727/R gives you a choice of four ambience-producing DSP surround modes (Theater, Hall, Live and Arena) so you can select the listening environment that best suits your source and your mood.

■ IPM System

Onkyo's Intelligent Power Management (IPM) system switches on the TX-SV727/R and automatically selects Video-1 when you turn on your TV, giving you instant surround sound.

■ Multiroom and Multisource Capability

You can listen to a CD in the bedroom while someone else enjoys the radio or any other source in the main room. (Requires additional speakers and optional accessories. The necessary accessories may differ, depending on area where sold. Your authorized Onkyo service center has details.)

■ On-screen Displays

Easy-to-follow on-screen displays in your choice of eight colors make adjusting the surround sound parameters simple.

■ Programmable Universal RI Remote Control

The programmable universal remote gives you command of a complete A/V entertainment system. It has a luminous panel, and all RI (Remote Interactive) commands are preprogrammed – so you can easily operate the major function of Onkyo components bearing the RI symbol.

■ Useful Extras You'll Enjoy

- **4 Video and 6 audio inputs:** For all your present and future AV needs.
- **Front panel Video-4 Input:** Makes camcorder connection and playback easy.
- **8 Sets of heavy-duty, multiway speaker binding posts:** They offer higher quality, more dependable, loss-free speaker connection and can easily accommodate large speaker lugs.
- **30 Random FM/AM presets and 3-group classification:** Lets you store your 30 preset stations into three groups and name the groups.
- **Recording selector:** You can listen to a different source while you record, or put background music on videos.
- **Selective tone control:** Boosts those low 50 Hz-range bass frequencies and extends the treble range without discoloration.
- **Pre Out terminals:** In case you want to upgrade power to the front L/R/C channels, rear L/R channels, or extension L/R speakers, and/or connect a powered subwoofer or subwoofer amplifier.
- **Automatic FM scanning:** To quickly find your favorite stations.
- **Sleep timer:** Shuts down your system after you've gone to sleep.
- **RDS (European model TX-SV727R):** For Radio Data System reception (PS, PTY, RT, TP)

FOR USA MODEL

Note to CATV system installer:

- This reminder is provided to call the CATV system installer's attention to Section 820-40 of the NEC which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

FCC INFORMATION FOR USER

CAUTION:

Changes or modifications not expressly approved by the manufacturer for compliance could void the user's authority to operate the equipment.

NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate ratio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment dose cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between other equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which other receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FOR CANADIAN MODEL: (POUR LE MODELE CANADIEN)

- For models having a power cord with a polarized plug.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

- THIS DIGITAL APPARATUS DOES NOT EXCEED THE CLASS B LIMITS FOR RADIO NOISE EMISSION FROM DIGITAL APPARATUS SET OUT IN THE RADIO INTERFERENCE REGULATIONS OF THE CANADIAN DEPARTMENT OF COMMUNICATIONS.

- Sur les modèles dont la fiche est polarisée.

ATTENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

- L'INTERFERENCE, RADIO ELECTRIQUE GENEREE PAR CET APPAREIL NUMERIQUE DE TYPE B NE DEPASSE PAS LES LIMITES ENONCEES DANS LE REGLEMENT SUL LES PERTURBATIONS RADIO ELECTRIQUES, SECTION APPAREIL NUMERIQUE. DU MINISTERE DES COMMUNICATIONS.

FOR EUROPEAN MODEL

- This apparatus complies with requirements of EC directive 87/308/EEC.

"WARNING"

"TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE."

CAUTION:

"TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL."

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

- The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

- The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

Important safeguards

1. **Read Instructions** – All the safety and operating instructions should be read before the appliance is operated.
2. **Retain Instructions** – The safety and operating instructions should be retained for future reference.
3. **Heed Warnings** – All warnings on the appliance and in the operating instructions should be adhered to.
4. **Follow Instructions** – All operating and use instructions should be followed.
5. **Water and Moisture** – The appliance should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
6. **Carts and Stands** – The appliance should be used only with a cart or stand that is recommended by the manufacturer.

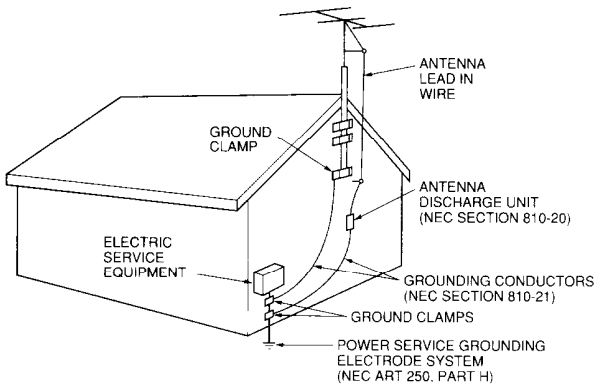
6A. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

PORTABLE CART WARNING

S3125A

7. **Wall or Ceiling Mounting** – The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. **Ventilation** – The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
9. **Heat** – The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
10. **Power Sources** – The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
11. **Polarization** – If the appliance is provided with a polarized plug having one blade wider than the other, please read the following information: The polarization of the plug is a safety feature. The polarized plug will only fit the outlet one way. If the plug does not fit fully into the outlet, try reversing it. If there is still trouble, the user should seek the services of a qualified electrician. Under no circumstances should the user attempt to defeat the polarization of the plug.
12. **Power-Cord Protection** – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, especially near plugs, convenience receptacles, and the point where they exit from the appliance.
13. **Cleaning** – The appliance should be cleaned only as recommended by the manufacturer.
14. **Power Lines** – An outdoor antenna should be located away from power lines.
15. **Nonuse Periods** – The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
16. **Object and Liquid Entry** – Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
17. **Damage Requiring Service** – The appliance should be serviced by qualified service personnel when:
    A. The power-supply cord or the plug has been damaged; or
    B. Objects have fallen, or liquid has been spilled into the appliance; or
    C. The appliance has been exposed to rain; or
    D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
    E. The appliance has been dropped, or the enclosure damaged.
18. **Servicing** – The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.
19. **Outdoor Antenna Grounding** – If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of the antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure 73.1.

FIGURE 73.1:
EXAMPLE OF ANTENNA GROUNDING AS PER NATIONAL ELECTRICAL CODE


ANTENNA LEAD IN WIRE
GROUND CLAMP
ANTENNA DISCHARGE UNIT (NEC SECTION 810-20)
ELECTRIC SERVICE EQUIPMENT
GROUNDING CONDUCTORS (NEC SECTION 810-21)
GROUND CLAMPS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250, PART H)
NEC – NATIONAL ELECTRICAL CODE

S2898A

Precautions

1. Warranty Card
The serial number is written on the rear panel of this unit. Copy the serial number and model number onto your warranty card and keep it in a safe place.

2. Recording Copyright
Recording of copyrighted material for other than personal use is illegal without permission of the copyright holder.

3. AC Fuse
The fuse is located inside the chassis and is not user-serviceable. If power does not come on, contact your Onkyo authorized service station.

4. Care
From time to time you should wipe the front and rear panels and the cabinet with a soft cloth. For heavier dirt, dampen a soft cloth in a weak solution of mild detergent and water, wring it out dry, and wipe off the dirt. Following this, dry immediately with a clean cloth. Do not use rough material, thinners, alcohol or other chemical solvents or cloths since these could damage the finish or remove the panel lettering.

5. Power
WARNING
BEFORE PLUGGING IN THE UNIT FOR THE FIRST TIME, READ THE FOLLOWING SECTION CAREFULLY.

- Some models are designed for use only with the power supply voltage of the region where they are sold.

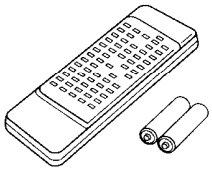
European and Australian models:	AC 230V, 50Hz
U.S.A. and Canadian models:	AC 120V, 60Hz
Worldwide models:	AC 220V/120V switchable, 50/60Hz

- **Voltage Selector (Rear Panel)**
  Worldwide models are equipped with a voltage selector to conform to local power supplies. Be sure to set this switch to match the voltage of the power supply in your area before plugging in the unit. Models without a voltage selector can only be used in areas where the power supply is the same as that of the unit.

Memory Preservation
This unit does not require memory preservation batteries. A built-in memory power back-up system preserves the contents of the memory during power failures and even when the unit is unplugged. The unit must be plugged in order to charge the back-up system.
The memory preservation period after the unit has been unplugged varies depending on climate and placement of the unit. On the average, memory contents are protected over a period of a few weeks after the last time the unit has been unplugged. This period is shorter when the unit is exposed to a highly humid climate.

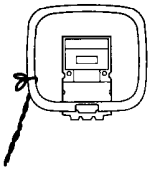
For USA and Canada
- Manufactured under license from Dolby Laboratories Licensing Corporation.
  Additionally licensed under Canadian number 1,037,877.
  "Dolby", "Pro Logic", and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

Supplied accessories



1 Remote control
2 Batteries
(size AA, R6, or UM-3)

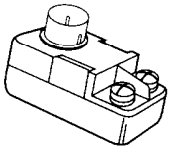
1 Remote control cable



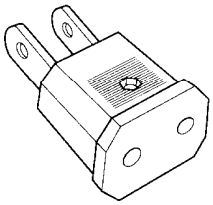
1 AM loop antenna

1 T-shaped FM antenna

(Worldwide models only)



1 75/300 ohm antenna adaptor



1 CV plug (Shape may vary according to the area where purchased.)

ATTENTION FOR BRITISH MODEL

- Replacement and mounting of an AC plug on the power supply cord of this unit should be performed only by qualified service personnel.
- IMPORTANT: The wires in the mains lead are coloured in accordance with the following code:
  Blue:Neutral
  Brown:Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Explanation

Surround system

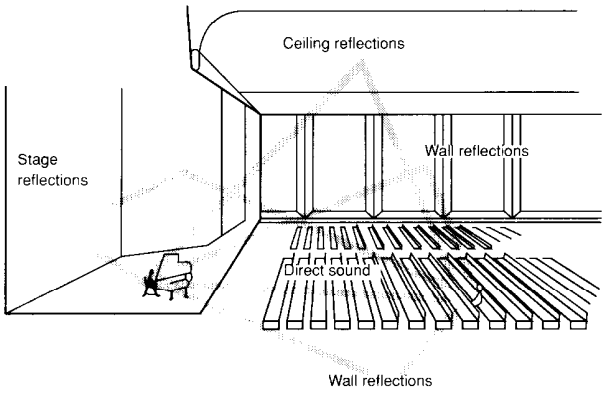
Many motion pictures produced in the last decade have been released in "Dolby Stereo" sound, with music, dialogue, and panned effects coming from the 3-channel front soundstage, and surround effects and ambience emanating from the sides and rear of the theater. These four channels are encoded, or matrixed, into a two-channel DOLBY STEREO release, and decoded in the theater by a professional DOLBY STEREO MP (Motion Picture) decoder. These surround sound effects are "hidden" in the two-channel stereo movie release, and decoded in the theater by special Dolby equipment.

These same two-channel motion picture masters are used for production of stereo VHS, VHS-Hi-Fi, Beta Hi-Fi, and stereo Laser Vision discs that you can buy or rent at your video store. This unit incorporates the Digital Dolby Pro Logic Surround Circuit, which is designed to emulate the audience experience found in DOLBY STEREO theaters. Like Dolby Surround, Dolby Pro Logic Surround is capable of creating a multi-dimensional soundstage, but with the increased channel separation it gives a far greater sense of "movement" and sound localization. Just like in the theater, the addition of the active Center channel ensures that all audience members hear dialogue coming from its on-screen sources regardless of seating position.

Since this unit is equipped with Front amplifiers, Center amplifier and Rear (Surround) amplifiers, Dolby Pro Logic Surround, Theater, Hall, Live and Arena effects can all be produced. You can enjoy the feeling of a movie theater or concert hall in your own room. To reproduce these effects, Rear (Surround) speakers and center speaker are necessary. The placement of these speakers is important. You can experiment with various positions and locations to find the best placement for optimum sound quality in your room.

DSP (Digital Signal Processor)

The DSP converts the musical signal into digital form and produces reflected sound from the digital signal. This is applied to the musical signal to yield an effect approaching that of a live performance.



Multiple Room Remote System (MRX)

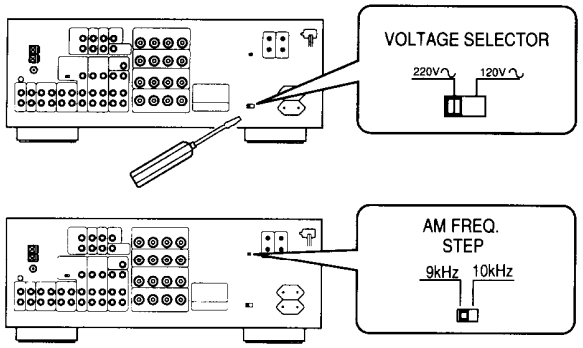
This remote system greatly increases system flexibility when it is used with Onkyo's or Xantech Corporation's Multi Room system.

1. **U.S.A., and Canadian models**
   The following concerns Xantech Corporation's Multi Room system.
   The gray terminal on the TX-SV727 is the MRX terminal.
   Used with your TX-SV727 the XANTECH 480B-00 (DINKY LINK) or 780-10 (J-BOX RECEIVER) and 789-40 (CONNECTING BLOCK), and 781C-00 (AC120V POWER SUPPLY) or 782-00 (HI CURRENT POWER SUPPLY) allows you to control speakers even when you are not in the same room as the TX-SV727. In addition to basic functions like speaker on-off and volume and so on, you can also control most ONKYO CD players and cassette decks that use the RI system. Adding an 282-00 (MINI EMITTER) allows you to control even the non-ONKYO components in your home entertainment system from a separate room.
   When the 282-00 is being used to control more than one device from a distance but the infrared beams from the 282-00 remote control alone will not reach these devices, connect an another 282-00 to the 789-40.
   Consult your nearest Onkyo Service Center with any questions concerning Xantech Corporation's Multi Room system.
2. **Models other than U.S.A., and Canadian models**
   The following concerns Onkyo's Multi Room system.
   The green terminal on the TX-SV727/R is the MRX terminal.
   The ONKYO HR-10 Remote sensor greatly increases system flexibility. Used with your TX-SV727/R the HR-10 allows you to control speakers even when you are not in the same room as the TX-SV727/R. In addition to basic functions like speaker on-off and volume and so on, you can also control most ONKYO CD players, cassette decks and digital audio tape decks that use the RI system. Adding an HE-50 (AC) Remote Emitter allows you to control even the non-ONKYO components in your home entertainment system from a separate room.
   When the HE-50 (AC) is being used to control more than one device from a distance but the infrared beams from the HE-50 (AC) remote control alone will not reach these devices, connect an HE-10 (Remote Emitter head) to the HE-50 (AC), and set it up to be aimed at the devices to be controlled.
   It would be necessary to change the construction of the TX-SV727/R in order to switch it from an ONKYO Multi Room system to a XANTECH Multi Room system. Consult your nearest Onkyo Service Center with any questions.

XANTECH is a registered trademark of Xantech Corporation (U.S.A).

Before using this unit

(Worldwide models only)

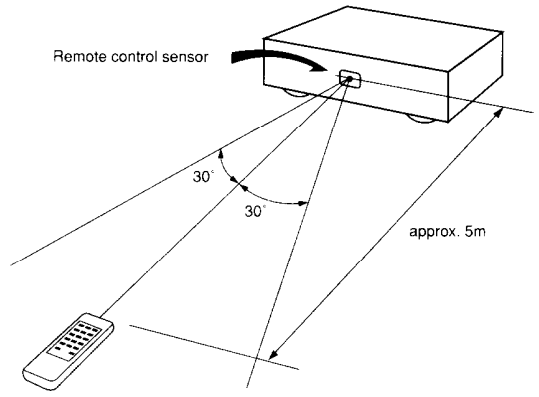


Setting the Voltage selector

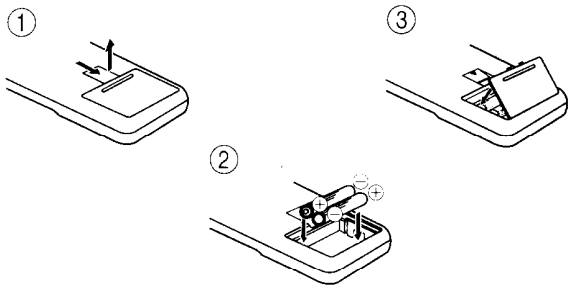
1. Determine the proper voltage for your area: 220V or 120V.
2. If the preset voltage is not correct for your area, insert a screwdriver into the groove in the switch. Slide the switch all the way to the right (120V) or to the left (220V), whichever is appropriate.

Setting the tuning step frequency

Worldwide models are equipped with a switch that controls the AM (9kHz/10kHz) band tuning steps.
Please set this switch to match the tuning step frequency in your area.
U.S.A.:AM 10kHz
Other areas:AM 9kHz



Insert the batteries into the remote control according to the illustration.



Using the remote control

The following information will help you get optimal use from the remote control.

- Place this unit away from direct bright light, which can prevent proper operation of the remote control.
- Make sure audio rack doors do not have tinted glass. If this unit is placed behind such a door, this may prevent proper remote control operation.
- Using other remote controls in the same room as this unit's remote control may cause interference.

Regarding the batteries

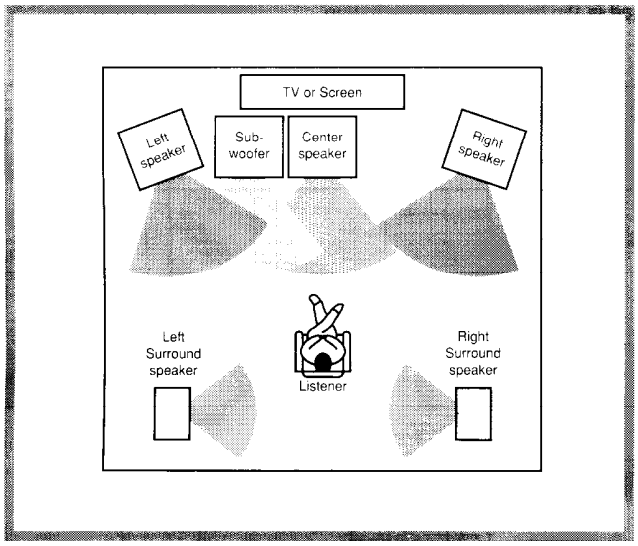
Average battery life is about one year, depending upon the frequency of use and the environment (temperature and humidity) in which the remote control is used. Only use batteries of the kind specified in the table below.

Type	Voltage	Size
Manganese	1.5V	AA, R6 or UM-3

Warning

- Do not leave an expired battery in the case – it may leak or damage the remote control.
- Do not use nickel cadmium (rechargeable) batteries.
- Replace both batteries at once; do not use one old battery and one new battery.

Speaker placement

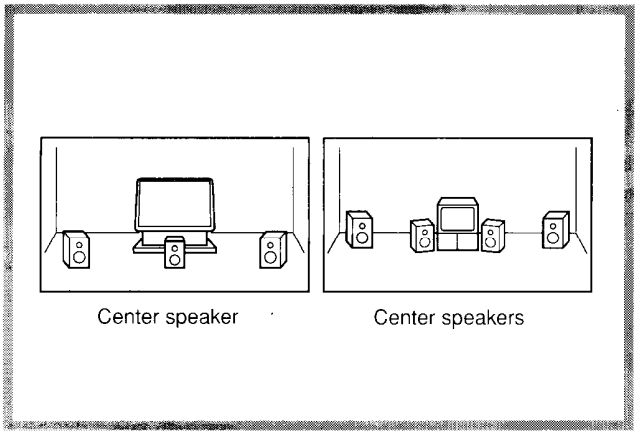


Placing the speakers for Surround effects

Speaker placement plays an important role in the reproduction of sound using Surround. The manner in which the speakers are placed varies depending on the size of the room and the wall coverings used in the room. The following shows an example of a layout for standard speaker placement. Refer to the example for placing the speakers appropriately in order to experience the best Surround sound.
In principle, for Surround sound reproduction, two Front speakers and two Surround (Rear) speakers are required. Refer to the illustration on the left.

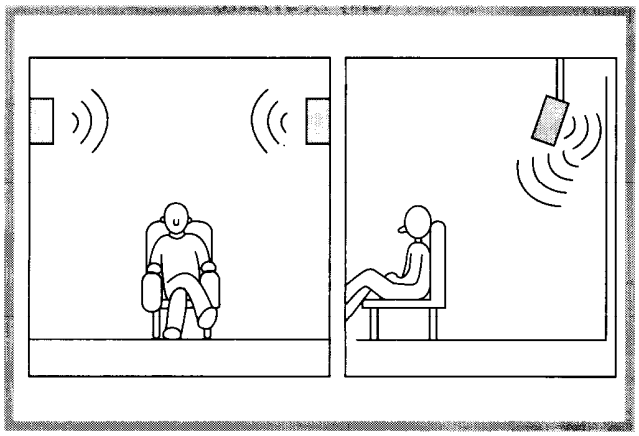
Placing the front speakes

If the Front L and R speakers are placed too far away from each other, sound spreads out too much and is dispersed resulting in diminished sound quality.



Placing the center speakers

To enjoy surround sound, a Center speaker is required in addition to the four basic speakers.
When one Center speaker is used
If a screen with a projector is used, place the Center speaker under the screen. If a Monitor TV is used, it is recommended that the Center speaker be placed on top of or under the Monitor.
When two Center speakers are used
Place the Center speakers on the left and right sides of the monitor TV as close as possible to the screen, facing slightly inward. They can be placed on top and under the TV. Please use magnetic-proof type speakers, otherwise the speakers might cause uneven colors on the screen of the monitor TV.



Placing the rear speaker(s)

To bring out the feeling of shifting sound, the rear speakers should not be placed on the floor, but would be most effective placed above ear position. They can also be placed facing the ceiling or walls to reflect the sound.

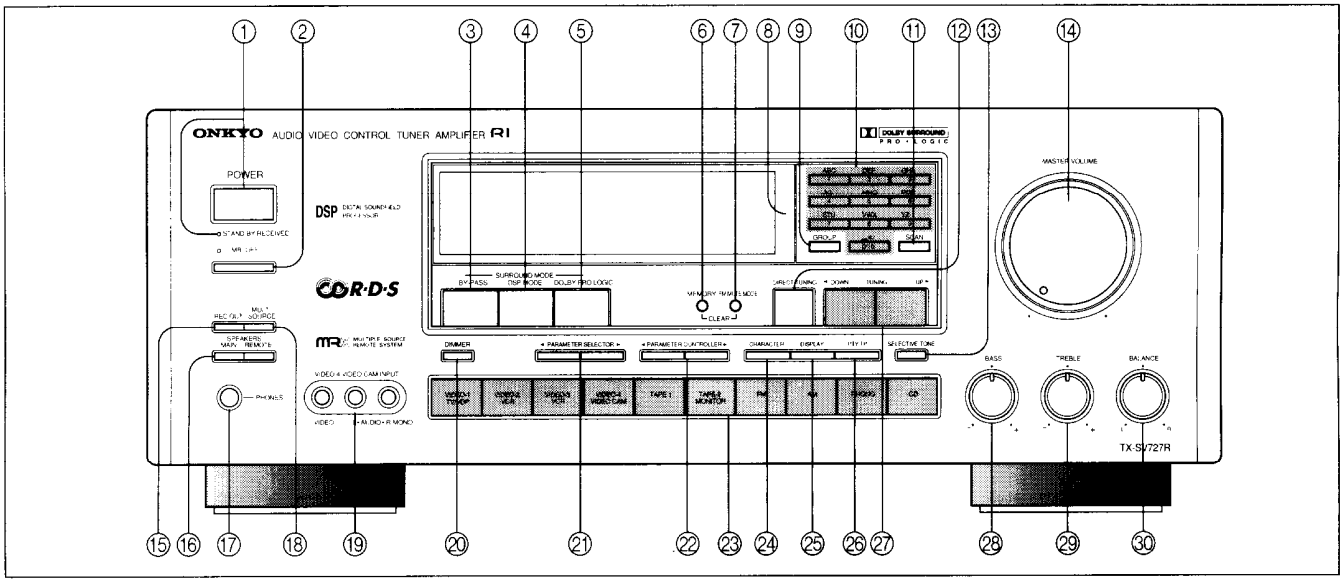
Placing a Subwoofer speaker

To enjoy powerful bass sounds, install a subwoofer with a built-in power amplifier. The placement of the Subwoofer does not affect the final quality of the sound image too much, therefore as its exact placement is not critical, you can install it more with the room layout in mind. To especially enjoy A/V Surround, a Subwoofer can bring out the best features of Dolby Pro Logic Surround.

Control positions and names

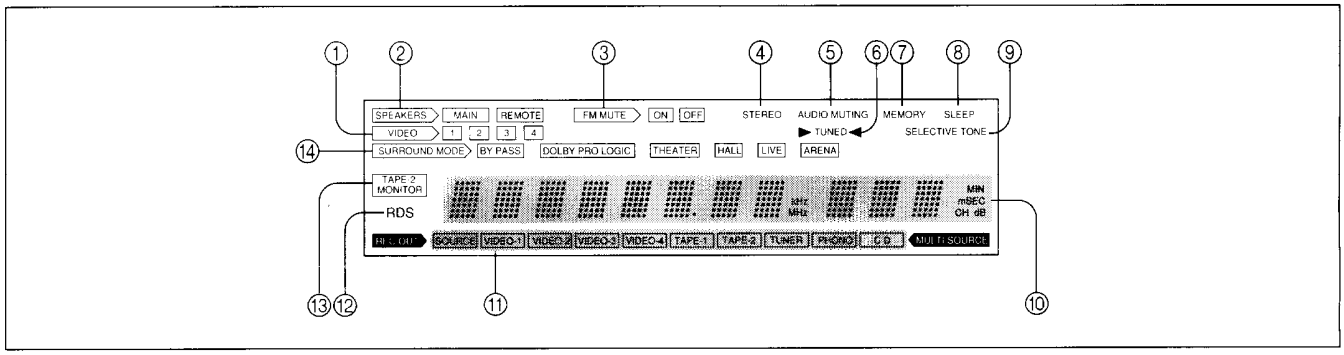
For more information about buttons or controls, turn to the page number listed in the brackets after each item.

Front panel



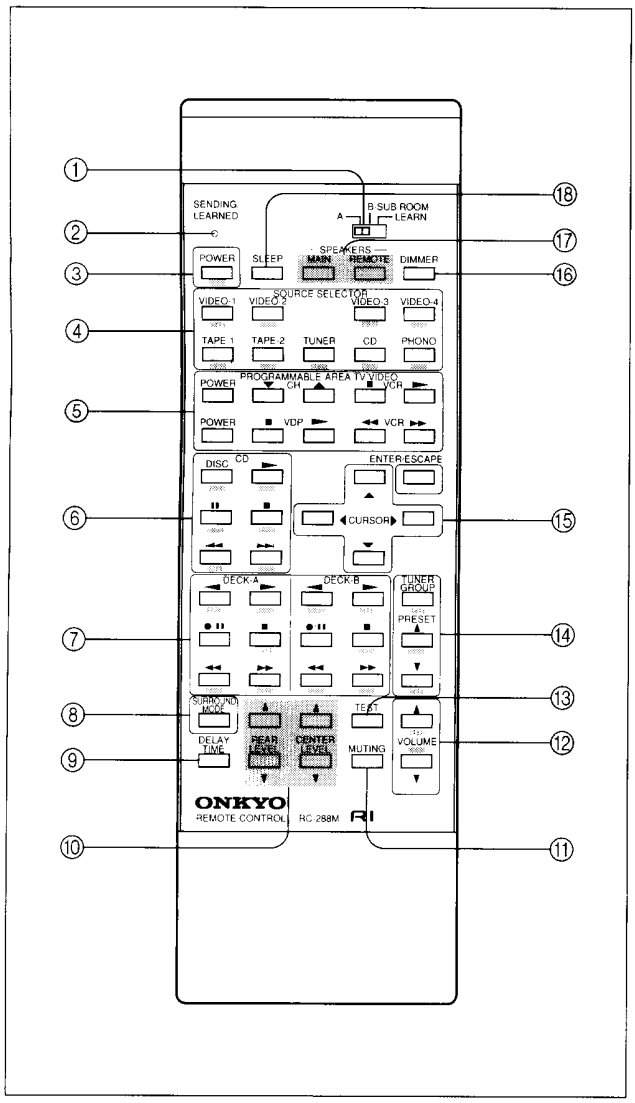
① Power button and stand-by received indicator (POWER) [22, 23]
② MR off button (MR OFF) and indicator [40]
③ By-Pass button (BY-PASS) [32]
④ DSP mode button (DSP MODE) [32, 36]
⑤ Dolby Pro Logic button (DOLBY PRO LOGIC) [32, 35]
⑥ Memory button (MEMORY) [25]
⑦ FM muting/mode button (FM MUTE/MODE) [24, 25]
⑧ Remote control sensor [6]
⑨ Group button (GROUP) [25, 28]
⑩ Number buttons (1 to 9, 0/10) [24, 25, 28]
⑪ Scan button (SCAN) [25, 27] (TX-SV727R) Preset Scan button (PRESET SCAN) [25] (TX-SV727)
⑫ Direct access tuning button (DIRECT TUNING) [24]
⑬ Selective tone control button (SELECTIVE TONE) [23]
⑭ Volume control knob and indicator (MASTER VOLUME) [23]
⑮ Recording out button (REC OUT) [29–32]
⑯ Speaker selector buttons (SPEAKERS MAIN/REMOTE) [23, 41]
⑰ Headphone jack (PHONES) [23]
⑱ Multi-source button (MULTI SOURCE) [41]
⑲ VIDEO-4 input jack (VIDEO-4/VIDEO CAM INPUT) [10]
⑳ Dimmer button (DIMMER) [23]
㉑ Parameter selector buttons (PARAMETER SELECTOR) [32–40]
㉒ Parameter controller buttons (PARAMETER CONTROLLER) [32–40]
㉓ Input selector buttons [22]
Audio selectors
(CD, PHONO, FM, AM, TAPE-1, TAPE-2 MONITOR)
Video selectors
(VIDEO-1 TV/VDP, VIDEO-2 VCR, VIDEO-3 VCR, VIDEO-4 VIDEO CAM)
㉔ Character button (CHARACTER) [28] (Only TX-SV727R)
㉕ Display button (DISPLAY) [27, 28] (Only TX-SV727R)
㉖ PTY/TP button (PTY/TP) [27] (Only TX-SV727R)
㉗ Tuning selector buttons (DOWN, UP) [24, 28]
㉘ Bass control knob (BASS) [23]
㉙ Treble control knob (TREBLE) [23]
㉚ Balance control knob (BALANCE) [23]

Display



① Video input selector indicators
② Speaker selector indicators
③ FM muting on/off indicators
④ FM stereo indicator
⑤ Audio muting indicator
⑥ Tuned indicator
⑦ Memory indicator
⑧ Sleep indicator
⑨ Selective tone control indicator
⑩ Multi function display
Frequency / input selector / character / Preset station / sleep timer / multi-source volume level / delay time / center, rear volume level
⑪ Recording out / multi-source indicators
⑫ RDS indicator (TX-SV727R only)
⑬ Tape-2 monitor indicator
⑭ Surround mode indicators

Remote Control



① A/B/LEARN selector switch (A/B-SUB ROOM/LEARN) [18, 19, 40]

This switch is used for three functions

A — When using the remote control in the main room. All of the buttons on the remote control can be used. (The PROGRAMMABLE AREA TV/VIDEO buttons can be used when memorizing remote control function of TV and Video equipment.)

B/SUB ROOM — When using the remote control in the sub-room. Only the buttons that are underlined and have blue writing can be used. These are blue lines on the base of the selector switch to help identify the selector position.

LEARN — Set the switch to this position when memorizing functions from another remote control.

② Sending/learned indicator [18, 19]

③ Power button (POWER) [23]

④ Input selector buttons [23]

(Video 1 to 4, PHONO, CD, TUNER, TAPE-1, TAPE-2)

⑤ PROGRAMMABLE AREA TV/VIDEO buttons [18, 19]

You are able to use these buttons when memorizing remote control functions of TV and video equipment. For details, please refer to "Learning remote control codes using the 10 programmable buttons" on page 18–19.

⑥ CD operation buttons

These buttons are used to operate an ONKYO CD player with the RI mark.

⑦ Tape operation buttons (DECK-A, DECK-B)

These buttons control ONKYO double cassette tape decks that can be remote controlled. Use the DECK-B buttons to control single cassette tape decks with the RI mark.

⑧ Surround mode button (SURROUND MODE) [32, 35, 36]

⑨ Delay time button (DELAY TIME) [38]

⑩ Rear level up/down buttons (REAR LEVEL ▲/▼) [37]
Center level up/down buttons (CENTER LEVEL ▲/▼)

⑪ Audio muting button (MUTING)

This button temporarily switches off the sound from the speakers or headphones by operating this unit audio muting circuits. The audio muting indicator AUDIO MUTING will flash. Pressing the button again or using the POWER button on the remote control to turn the power on will turn off the audio muting.

Audio muting using this button does not affect the sound of the multi-source (Remote speakers).

Press the SPEAKERS REMOTE to mute the sound of the multi-source.

⑫ Volume buttons (VOLUME ▲/▼) [23, 41]

When adjusting the level of the Front Main, Center or Rear (Surround) speakers, set the A / B-SUB ROOM / LEARN switch to A, and use these buttons.

When adjusting the level of the Remote speakers (perhaps in another room), set the A / B-SUB ROOM / LEARN switch to B, and use these buttons.

⑬ Test tone button (TEST) [37]

⑭ Tuner operation buttons (TUNER) [25]

Group selector button (GROUP)

Preset memory up/down buttons (PRESET ▲/▼)

⑮ On-screen cursor buttons (CURSOR ▲, ▼, ◄, ►) [20]
On-screen enter/escape buttons (ENTER/ESCAPE)

Use these buttons when operating using the On-screen display. For details, please refer to the explanations on page 20 and for the operation of each On-screen item.

⑯ DIMMER button (DIMMER)

This button can be used to change the brightness of the display. The brightness changes in four steps: bright, medium, dim, off.

⑰ Speaker selector buttons (SPEAKERS MAIN / REMOTE) [23, 41]

⑱ Sleep button (SLEEP)

Press to set the power-off timer. The sleep timer is a function which turns off the power to the system after a certain period from the time it is set. When this button is pressed, "90 MIN" is displayed for 5 seconds, and the power will go off 90 minutes later. Each time the button is pressed during 5 seconds, the timer setting changes by 10 minutes e.g. 80, 70, 60 ... While the sleep timer is operating, the SLEEP indicator is lit. If the sleep button is pressed during this time, the amount of time remaining on the timer is displayed, and if the button is pressed during that display, 10 minutes will be subtracted from that time.

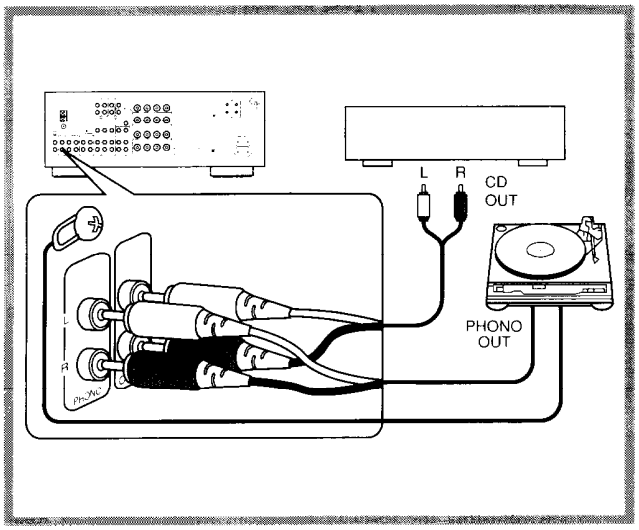
If the button is pressed when the panel display shows 10 minutes or less, the sleep timer is cancelled, and the power is not turned off.

NOTE:

Many of the labels on the remote controller are printed in luminescent ink. If you hold the remote controller under a light and then darken the room, the labels will remain visible for some time, enabling buttons to be more easily identified.

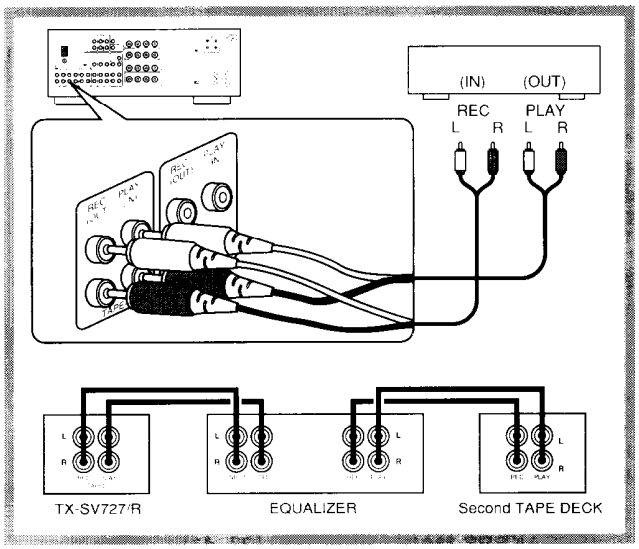
Making system connections

- **Do not plug in the power cord until all connections have been made.**
- **On each pair of input jacks, the lower jack (marked R) corresponds to the right channel, and the upper jack (marked L) to the left channel.**
- **Please refer to the instruction manual of each component when making any connections.**



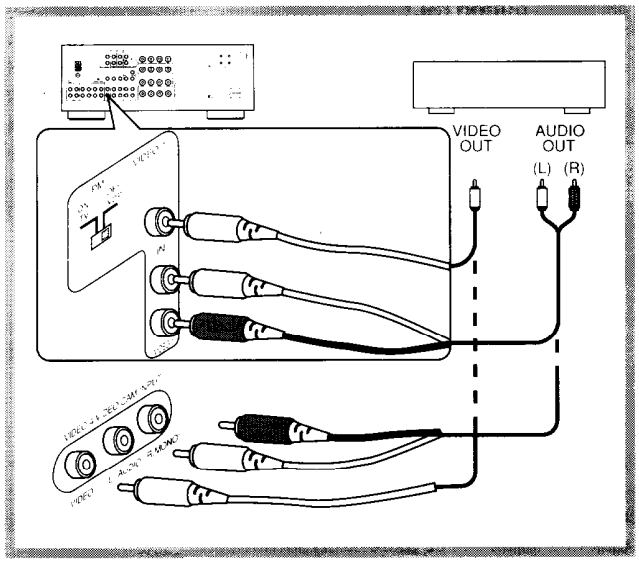
Connecting a CD player (CD) and a turntable (PHONO)

Connect the output leads of the turntable to the PHONO jacks.
Be sure to connect the ground (earth) lead wire from the turntable to the ground terminal (GND). Turntables not provided with GND wires do not need to be connected in this way.
Place the turntable on a firm shelf or deck free from vibrations (especially those generated by the speaker system). If the turntable can pick up such unwanted vibrations, not only will the performance of the unit drop, but distortion in the bass frequencies and howling in the speakers may also occur.
Connect a compact disc player to the CD input jacks.



Connecting a tape deck (TAPE-1, TAPE-2)

This unit has facilities for two tape decks.
If you are using only one tape deck, connect it to the TAPE-1 jacks. If you have two tape decks, connect one to the TAPE-1 jacks and the other to the TAPE-2 jacks.
If you wish to use a graphic equalizer as well as two tape decks, connect the graphic equalizer to the TAPE-2 jacks, and connect the second tape deck to the TAPE jacks on the graphic equalizer. (See the diagram.)
Connect the OUTPUT jacks on the graphic equalizer to the TAPE-2 PLAY jacks on the A/V Tuner Amplifier, and the INPUT jacks to the TAPE-2 REC jacks as shown.
See page 30 on how to use a graphic equalizer.

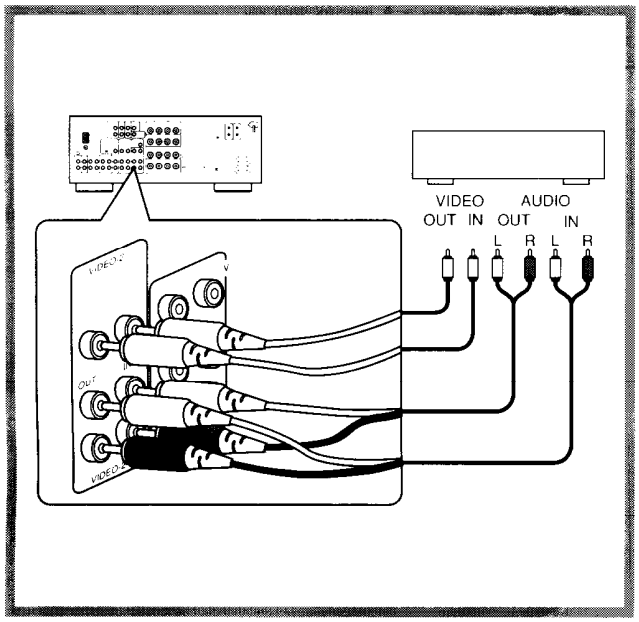


Connecting a Video Disc Player or Video Cassette Player (VIDEO-1, VIDEO-4)

Connect the VIDEO output of the video disc player to this unit (V) VIDEO-1 and/or VIDEO-4 "IN" jack and the audio output to the VIDEO-1 and/or VIDEO-4 L and R "IN" jack. The VIDEO-1 and/or VIDEO-4 jack is only for playback, there is no OUT jack. For more details, refer to the video disc player instruction manual.

NOTE:
The IPM function can operate only if a TV is connected to the VIDEO-1 jack. (See page 12.)

VIDEO-4
When the audio output of the video equipment is monaural, connect to the R audio input jacks.

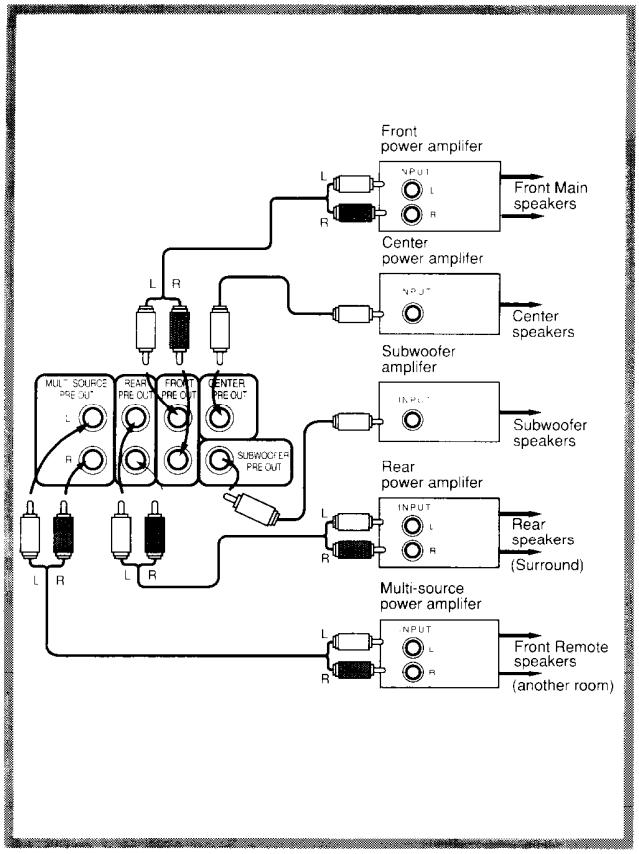


Connecting a Video Cassette Recorder (VIDEO-2 and/or VIDEO-3)

Connect the VIDEO output of the VCR to the rear panel (V) VIDEO-2 and/or VIDEO-3 "IN" jack and the VIDEO input of the VCR to the rear panel (V) VIDEO-2 and/or VIDEO-3 "OUT" jack. Then connect the AUDIO output of the VCR to the VIDEO-2 and/or VIDEO-3 L and R "IN" jacks. Finally, connect the AUDIO input of the VCR to the VIDEO-2 and/or VIDEO-3 L and R "OUT" jacks.

- When using a playback-only VCR, you only need to make the output connections.

For more details, refer to the VCR instruction manual.

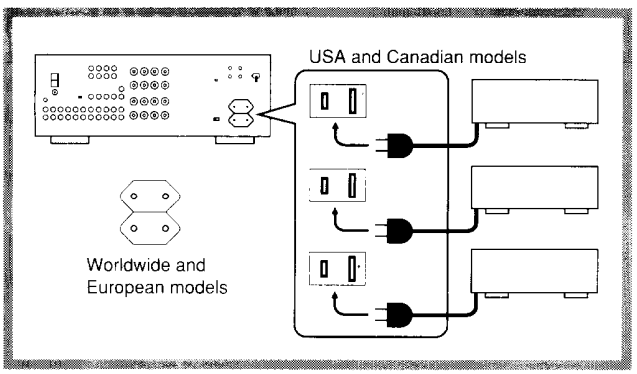


Amplifier connections

This unit is equipped with a set of PRE OUT terminals which allow you to connect an external power amplifier. With a powerful power amp, you can play music at even higher volume levels than with this unit alone. Connect the power amp to the PRE OUT terminals of this unit, and connect the speakers to the power amp.

NOTE:

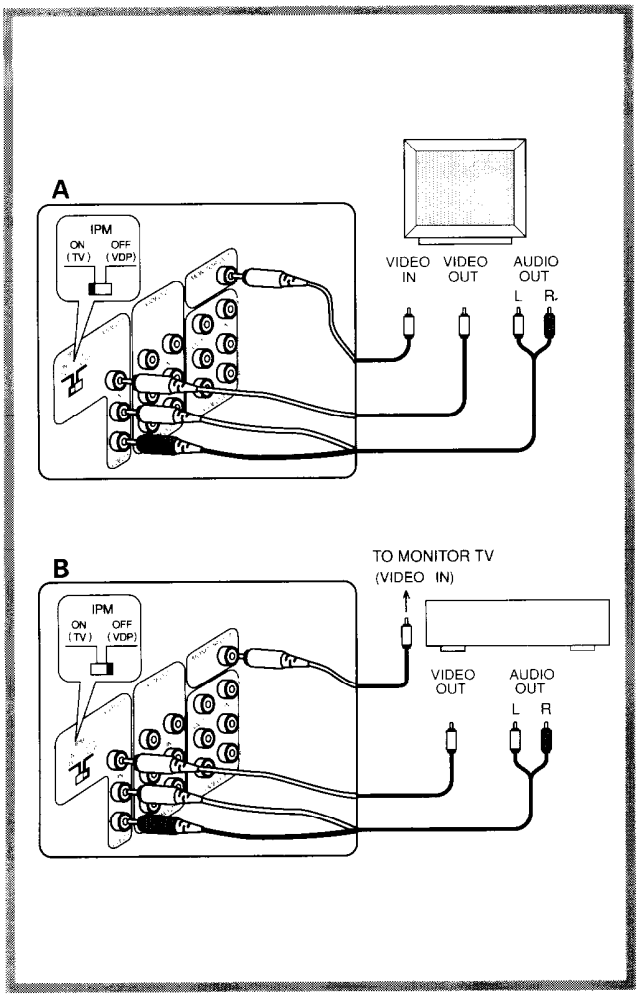
- No signals will be output from FRONT, REAR, CENTER and SUB WOOFER PRE OUT when the SPEAKERS MAIN button is turned off.
- No signals will be output from MULTI SOURCE PRE OUT when the SPEAKERS REMOTE button is turned off.



AC outlets

The SWITCHED outlet is switched on and off by the power buttons on the front panel and remote control.

The shape, number and total capacity of the AC outlets may differ according to the model and the area where the unit is purchased. Be careful that other components connected to this unit do not exceed the capacity that is printed on the rear panel above the AC outlets.



Connecting a monitor (MONITOR OUT)

1. Connect the TV VIDEO input to this unit MONITOR OUT jack. There is no need to perform an audio connection since sound will be sent directly from this unit to the speaker systems.
2. This unit does not have an RF converter. Therefore, it can be used with only a monitor TV equipped with a video input jack.
3. Interference may be caused between the TV and this unit. If this interference occurs, place this unit and the TV as far apart as possible. We do not recommend the use of a common TV/FM antenna (see antenna section).

IPM (Intelligent Power Management System)

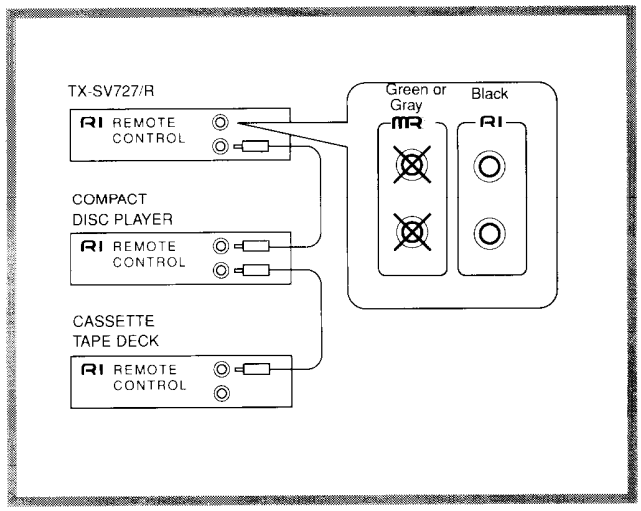
If the TV connected to VIDEO-1 is turned on, this unit is automatically turned on and the input selector is set to VIDEO-1. The IPM system then automatically switches the unit off when the TV is switched off (provided that the input selector remains set to VIDEO-1).

A. Connection where IPM will operate
Set the IPM switch to ON. VIDEO-1 TV is displayed on the display.

B. Connection where IPM will not operate
Set the IPM switch to OFF. VIDEO-1 VDP is displayed on the display.

NOTES:

- This unit will automatically switch on approximately three to five seconds after the TV comes on.
- The IPM function is not operating if the TV screen remains blank, even if the TV is swiched on.



Connections for remote control

A cassette tape deck and compact disc player that have the ONKYO RI mark can be operated using the accessory remote control with this unit.

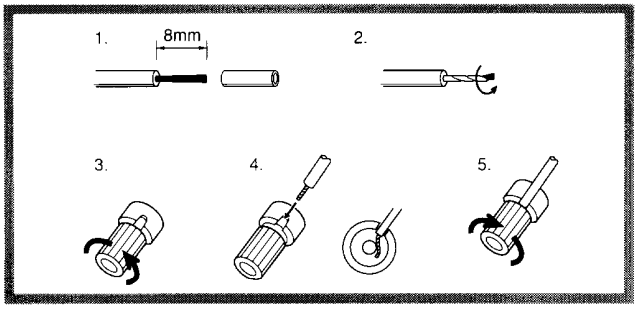
Connect a remote control cable to the black jack with the RI mark. Never connect it to the green or gray jack with the MR mark.

Connect the remote control cable as shown left side to enable remote control operation of other components.

NOTES:

- To enable proper remote control operation, both the RI cable and the audio cables must be connected between units.
- This unit's remote control cannot be used to control ONKYO turntables.
- An RI remote control cable equipped with a 1/8" (3.5 mm) miniature 2 conductor phone plug is included with this unit and with any other component with the RI mark.

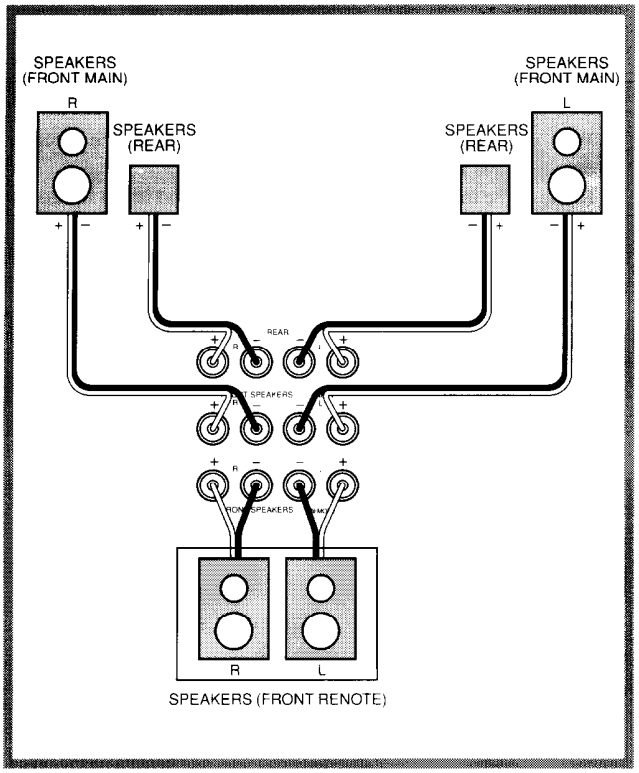
Making speakers connections



Connecting the speaker cables

When using banana plugs, make sure the speaker terminal screws are screwed in firmly before inserting the banana plugs.

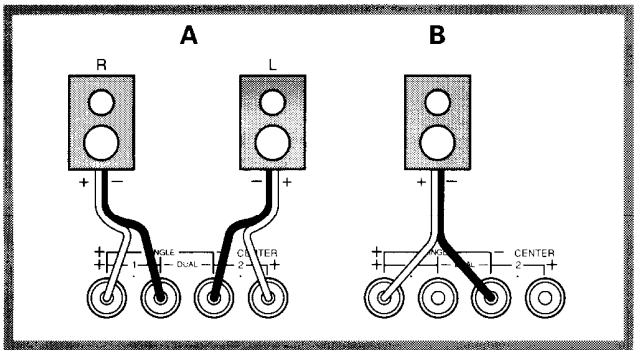
NOTE:
Speaker terminals on European models are not banana-plug compatible.



Connecting the front, rear and remote speakers

If you want to use the Surround effects, the Rear and Center speakers must be connected.
Please refer to "Connecting the Center speaker(s)" below when connecting Center speaker(s).
The speakers that are to be located in the same room as this unit should be connected to the MAIN speaker terminals.
Different sets of speakers that are to be located in another room (or the same room) should be connected to the REMOTE speaker terminals.
To get the full effects of the Surround processor, ensure the left and right Front MAIN and Rear speakers are not reversed.

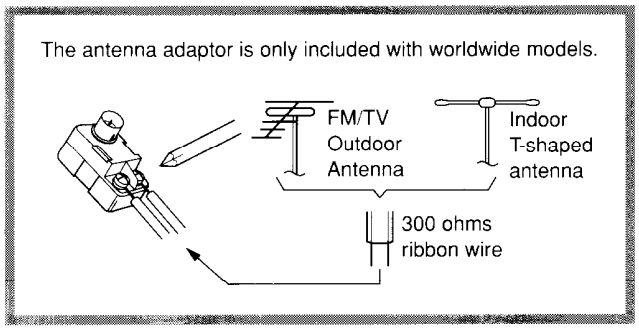
NOTE:
- Use speaker cables that have a low impedance and that are as short as possible.
- SPEAKER IMPEDANCE
  FRONT MAIN:
  6 ohms min/speaker
  SINGLE CENTER, REAR, FRONT REMOTE:
  8 ohms min/speaker
  DUAL CENTER:
  4 ohms min/speaker



Connecting the Center speaker(s)

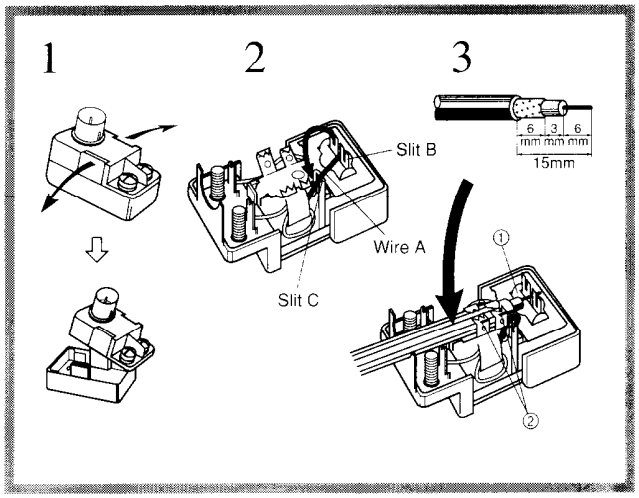
A: when using 2 center speakers
B: when using 1 center speaker.

Making antenna connections



Connecting the T-shaped antenna or 300 ohm ribbon wire to the 75/300 ohm adaptor (Worldwide models)

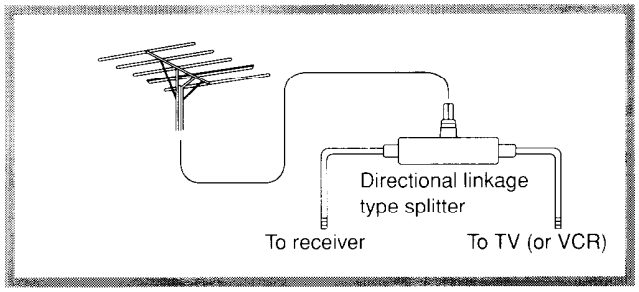
Loosen the screws and wrap the wire around these screws. Then tighten the screws with a screwdriver



Connecting the coaxial cable to the 75/300 ohm adaptor (Worldwide models)

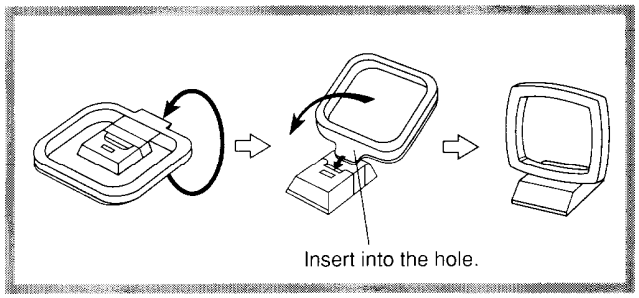
1. With your fingernail or a small screwdriver, press the stoppers outwards and remove the cover.
2. Remove the transformer wire A from slit B and insert it into slit C.
3. Prepare the coaxial cable as shown in the diagram. Connect the 75/300 ohm antenna adapter to the coaxial cable

① Insert the end of the cable.
② Clamp it in place with pliers.



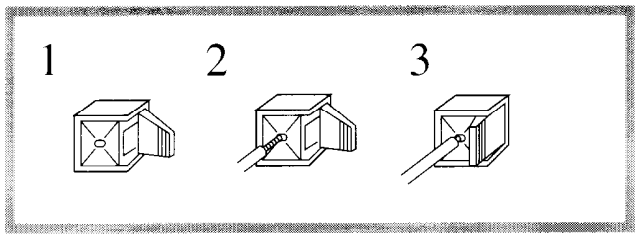
Directional linkage

Do not use the same antenna for both FM and TV (or VCR) reception since the FM and TV (or VCR) signals can interfere with each other. If you must use a common FM/TV (or VCR) antenna, use a directional linkage type splitter.



Assembling the AM loop antenna

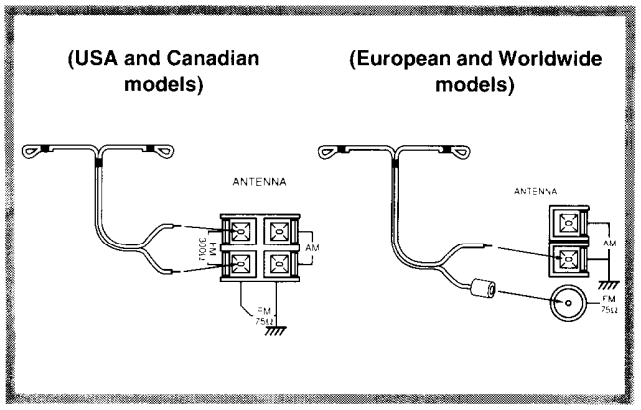
Assemble the loop antenna as shown in the illustration.



Connecting the antenna cable

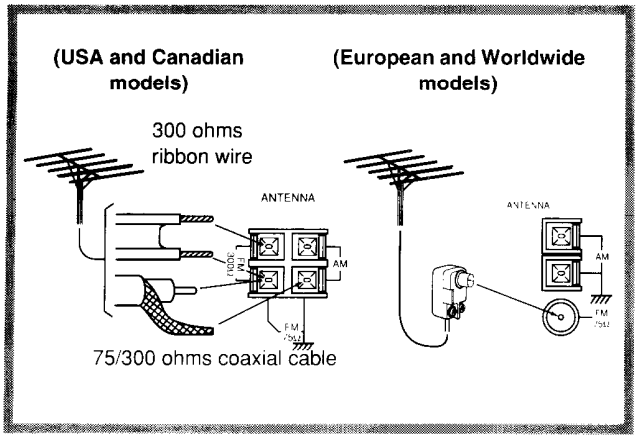
1. Press down the lever.
2. Insert wire.

Return the lever



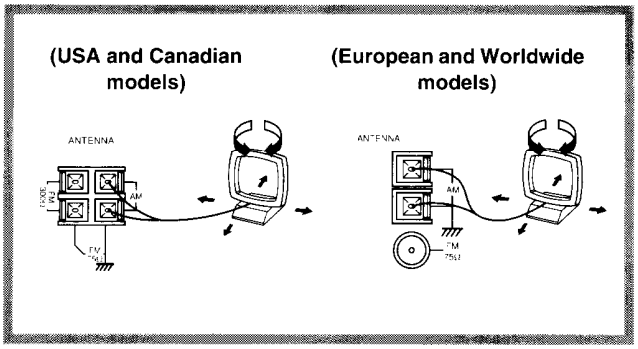
Connecting the T-shaped FM antenna

The T-shaped FM antenna is for indoor use only. Extend the antenna and move it in various directions until the clearest signal is received. Fix it with push pins or similar in the position giving the least amount of distortion.



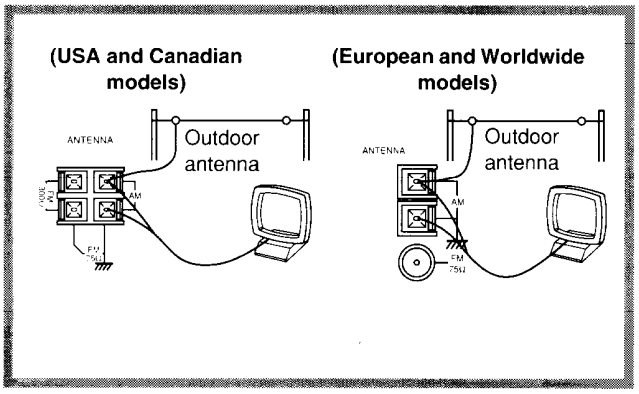
Connecting an FM outdoor antenna

If the reception is not very clear with the attached T-shaped FM antenna, the use of an external antenna is recommended.
Please make sure that you comply with the following considerations regarding the location.
Keep the antenna away from noise sources (neon signs, busy roads etc.)
It is dangerous to put it close to power lines, so keep it well away from power lines, etc.



Connecting an AM loop antenna

The AM loop antenna is for indoor use only. Set it in the direction and position where you receive the clearest sound. Put it as far as possible away from the main unit, TV set, speaker cables and power cord.



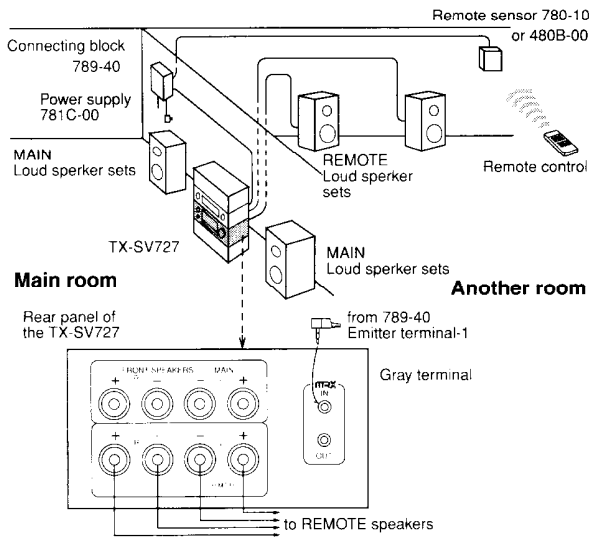
Connecting an AM outdoor antenna

When reception is not satisfactory using the attached AM loop antenna alone, connection of an external antenna is recommended. (Do not remove the AM loop antenna)
The external antenna will be more effective if you stretch it horizontally in a high place above a window or outside.

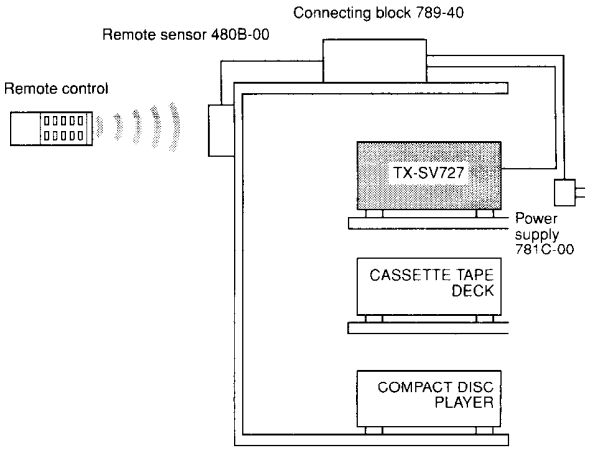
Connection for Multiple Room Remote Control

1. **XANTECH CORPORATION MULTI ROOM system (For U. S. A. and Canadian models)**
   Consult the store where this unit was purchased or an Onkyo Service Center for information concerning the connections.

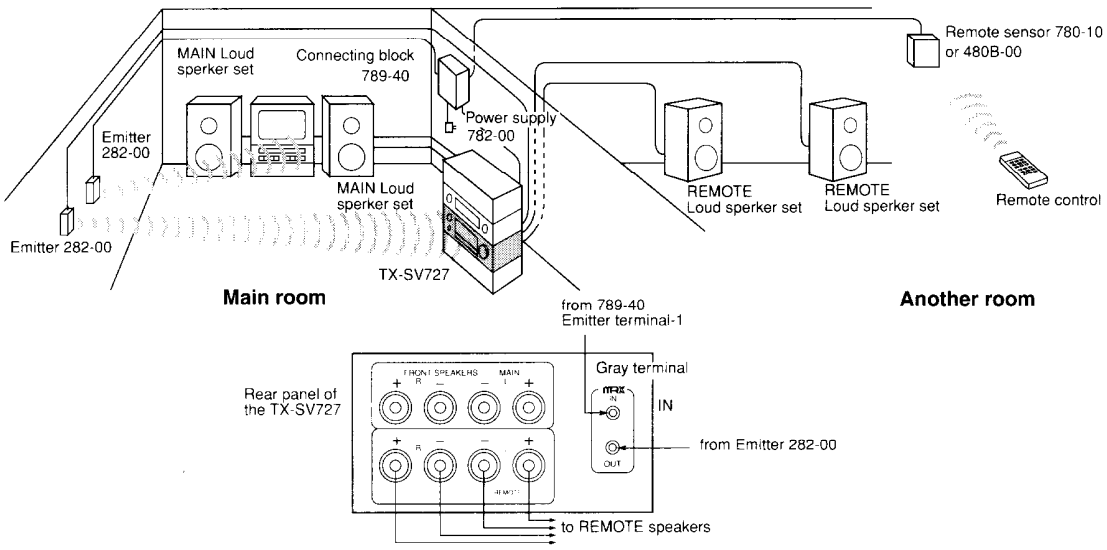
In order to use the TX-SV727 to control a CD player and cassette deck, both displaying ONKYO's RI mark, from another room, make the connections as shown in the illustration below.



To enable remote control operation when the TX-SV727 is mounted in a rack which will not permit infrared beams to pass, mount the 480B-00, 789-40 and 781C-00 somewhere outside the rack, so that the signals can be picked up.



In order to use the TX-SV727 to control a CD player and cassette deck, neither displaying ONKYO's RI mark, from another room, make the connections as shown in the illustration below. The Emitter 282-00 should also face the TX-SV727.

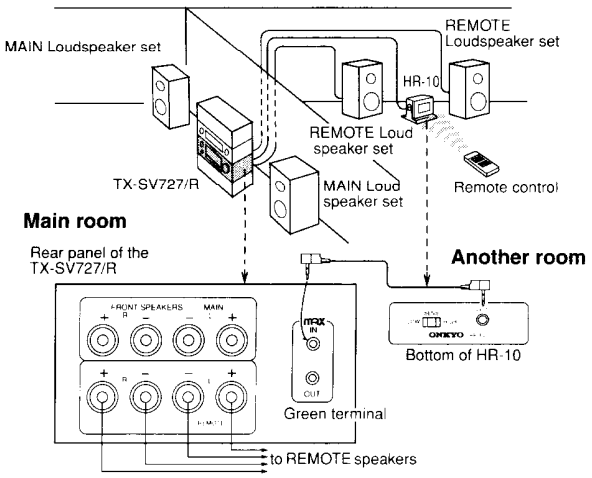


NOTES:

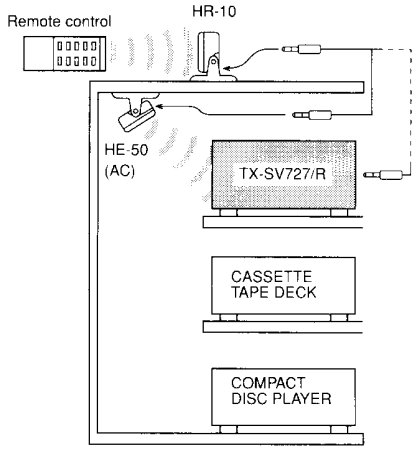
- Always unplug the AC power cord for the TX-SV727 and multiroom system when connecting the MRX.
- Insert the MRX mini plug into the gray terminal on the rear panel of the TX-SV727.

2. ONKYO MULT ROOM system (Models other than U. S. A. and Canadian models)

When using only the HR-10 (optional) to control this unit in the main room from another room, connect them as shown below.
In this case, both the ONKYO CD player and the cassette tape deck bearing the RI mark and connected to this unit can be controlled.



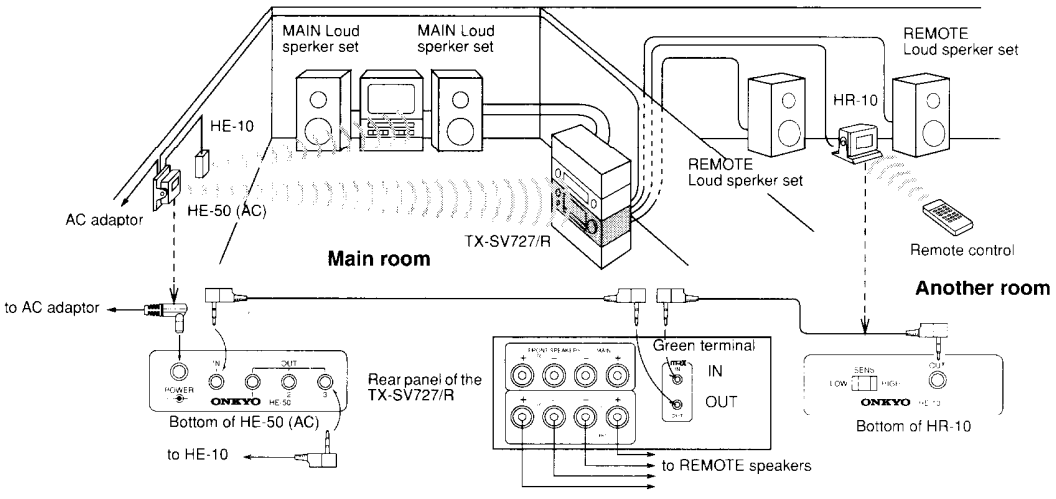
To enable remote control operation when this unit is mounted in a rack which will not permit infrared beams to pass, mount the HR-10 somewhere outside the rack, so that the signals can be picked up. If all components bear the RI mark, connect a cable from the HR-10 to the MRX iput on this unit, and from there connect RI cables to the other components (see page 11). If the other components can receive infrared remote control signals, but do not have the RI mark, mount an HE-50(AC) inside the cabinet so that signals from it will reach the sensors in all components, and connect it to the HR-10 with an cable.



A connection example using the HR-10 (optional) and HE-50 (AC) (optional) to control components in the main room from another room is shown below.
If all the components can not be controlled by the HE-50 (AC) alone because they are installed at various places in the main room, use a Remote Emitter head HE-10 (optional). This also allows you to control components that are not ONKYO, or do not have an RI mark, as long as they can be controlled by infrared remote control. When using an HE-50(AC), the HE-50(AC) or HE-10 should also face this unit.

Note on multiple room cables

Any remote sensors and emitters (HR-10, HE-50(AC), HE-10) should be connected with low capacitance shielded 2-wire coaxial cables with 1/8" (3.5 mm diameter) mini-plug connectors. Maximum cable length is determined by the characteristics of the particular cables used but up to approximately 164' (50 m) lengths are generally practical.
Refer to the instruction manual which comes with the HR-10 when making these connections.
Sets of loudspeakers in another room should be connected to this unit in the main room with low impedance cables.



NOTES:

- Always unplug the AC power cords for this unit and HE-50(AC) when connecting the MRX.
- Insert the MR mini-plug into the green terminal on the rear panel of this unit.

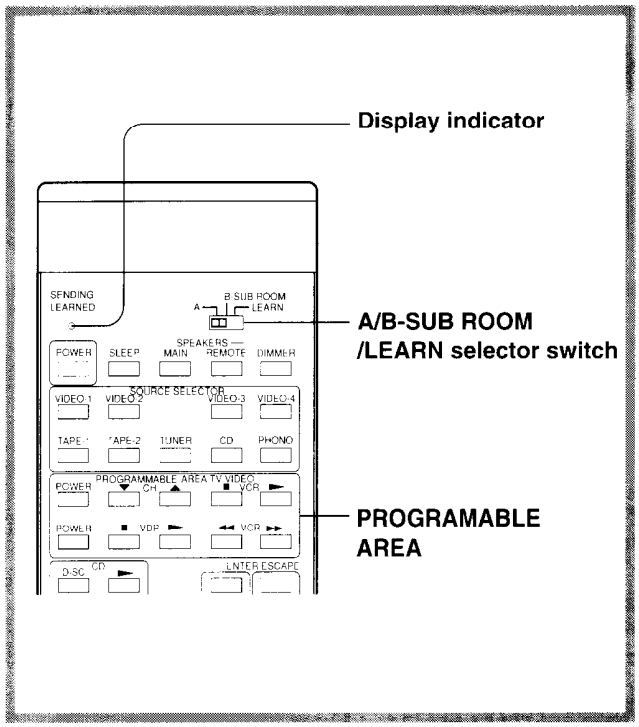
Learning remote control codes using the 10 programmable buttons

Universal Programmable Remote Control RC-288M

This remote control is a remote control which uses high-level computer technology to provide programming functions.
If you are using a product made by another company which has a remote control, you can memorize the codes of that product into this remote control. If you are using an ONKYO compact disc player, or cassette tape deck that has the RI mark, there is no need to memorize the codes of its remote control into this remote control. All of your remote control needs can be satisfied using this remote control alone.

NOTES:

- Commands of systems with the RI ONKYO mark are already stored at the A and B-SUB ROOM positions of the A/B-SUB ROOM/LEARN Selector switch. There is no need to "learn" them. (The RI mark is ONKYO's own mark.)
- If necessary, the 10 programmable buttons on the remote control can be reprogrammed to have a different function when the switch is in the A position, but not the B-SUB ROOM position.
- The output of most infrared remote control transmission units on the market today consists of a series of pulses (codes). By changing these codes, functions can be differentiated between products from different manufacturers. In order to mimic other remote controls, and control different devices with different codes, this remote control must be assigned the same codes as the other remote controls.



Displays and switches

The Display indicator (SENDING/LEARNED)

This indicator acts as a guide when this unit "learned" and is "sending" commands. It also warns the user when an error is made or when battery power is low.

If the indicator flashes

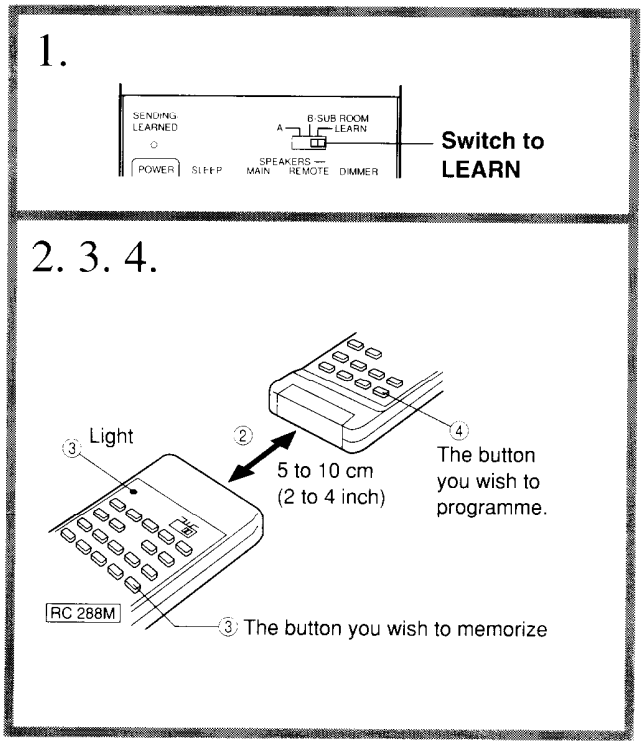
During learning, the indicator flashes if the codes being learnt are unstable and cannot be memorized properly. This is because this remote control requires highly stable transmission output for identifying codes. To ensure the reception of stable codes, place both remote control on a table or other level surface and position them at a fixed distance and orientation, facing each other.
Another possible reason for unstable transmission codes is worn-out batteries on the existing remote control. Replace the batteries of the existing remote control with new ones, then repeat the learning operation.
If the indicator flashes when a button is pressed on this remote control, it means that this remote control batteries are worn out. Replace its batteries with new ones.

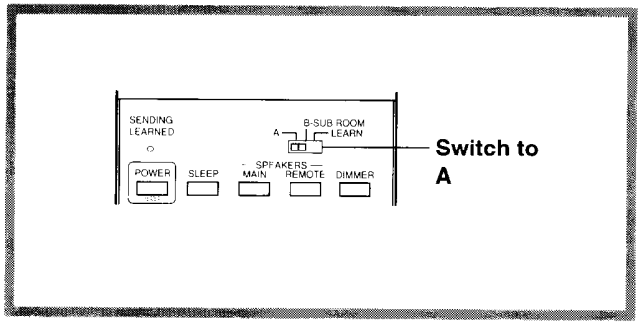
This remote control can also store remote control codes of other functions that are not indicated by these symbols, but they will have to use these buttons.
Be sure to assign functions to the buttons with the corresponding function names and/or symbols if at all possible. If functions and button names are different, the function which actually operates will be different from the label of the button you pushed.
For instructions regarding the operation of "learned" units, please refer to the individual instruction manuals for each product.
Even after codes have been memorized, please keep your existing remote control in a safe place. If the memorized codes are lost when the batteries run down, etc., it will be necessary to memorize them once again using the existing remote control.

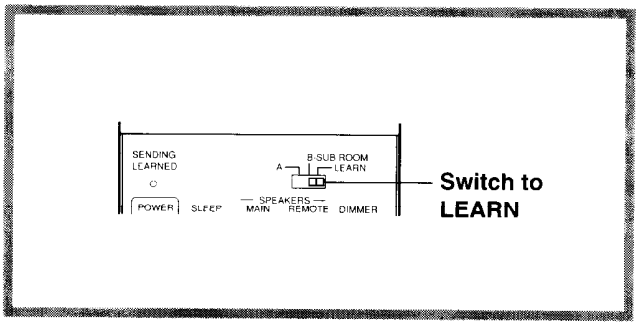
The programmable buttons

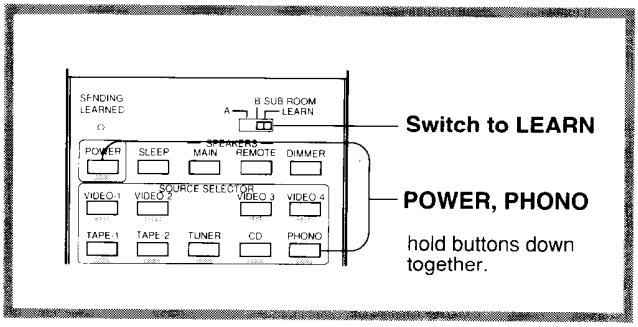
The Programmable section consists of the following functions.

For TV:	Power (POWER)
	Channel up/down (▼-CH-▲)
For VDP:	Power (POWER)
	Play (▶), Stop (■)
For VCR:	Play (▶), Stop (■)
	Rewind (◀◀), Fast Forward (▶▶)









"Learning" new controller codes

1. Set the A/B-SUB ROOM/LEARN selector switch to LEARN.
2. Place the head of your existing remote control 2-4 inches (5-10 cm) from the head of this remote control, laying both units on a table or another flat surface.
3. Press the button in the PROGRAMMABLE AREA of this remote control that you want to memorize the code into.
- The SENDING/LEARNED indicator lights.
4. Hold down the button you want to memorize on your existing remote control while the LEARNED indicator is lighted, until the LEARNED indicator turns off.
5. To continue the process and memorize another button, repeat steps 3 – 4.
- Hold down the button you wish to learn.

NOTES:

- Some remote controls use a single button to change codes, with the code changing each time the button is pressed. If you are using this kind of control, please perform "learn" operations for each function individually, one function to one this remote control button.
- This remote control uses infrared rays. Most remote control codes can be memorized using the infrared system; however, depending on the degree to which the system differs, there are some rare occasions where memorization is not possible.

Operating the remote control

Set the A/B-SUB ROOM/LEARN selector switch to A position. Then operate the remote control by pressing the buttons of the functions you want to use.

- If you press a button for which no code has been memorized, the SENDING/LEARNED indicator will not light up.
- Please check whether previously memorized functions are working properly. If the SENDING indicator is not illuminated when a programmed button is pressed, it may need to be relearned from your existing remote control.

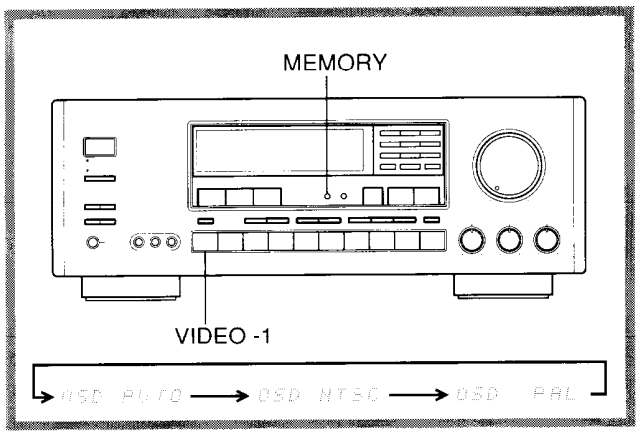
Changing commands

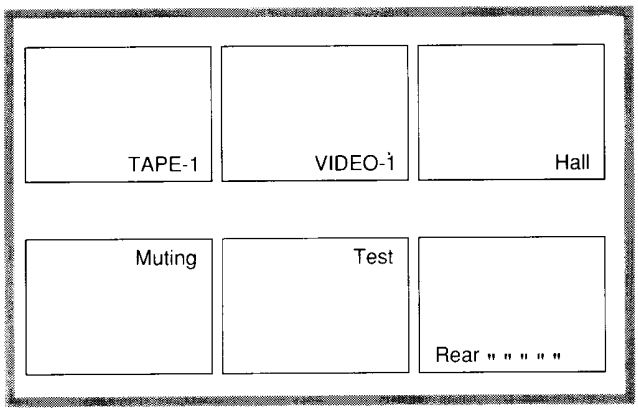
1. Set the A/B-SUB ROOM/LEARN selector switch to LEARN.
2. Commands should be memorized using the method outlined in the section "Learning" new controller codes.
- Entering new codes for certain buttons does not affect the functions of the other memorized buttons.

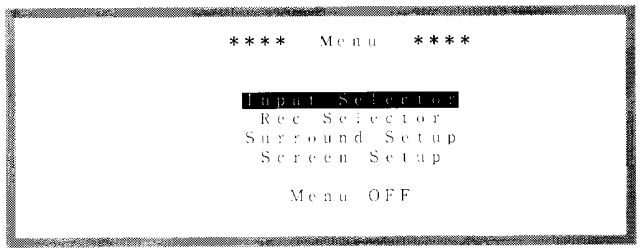
How to reset the RC-288M (Clearing all memorized command)

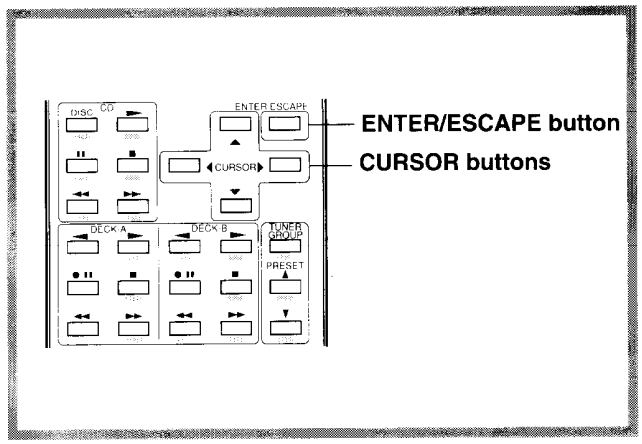
1. Switch the A/B-SUB ROOM/LEARN selector switch to LEARN.
2. Press and hold the POWER and PHONO buttons together until the SENDING/LEARNED indicator turns off.
- The previous memory in the programmable area will be deleted.

Using the On-screen display function
(This function is done entirely with the remote control)









Switching between the NTSC and PAL systems

U.S.A and Canadian models
The on-screen display function is only available when an NTSC TV system is used.
Models other than U.S.A. and Canadian models
The type of TV system can be switched between the NTSC and PAL systems. Follow the procedures below if the TV signal is being sent, but the screen is scrolling.
While pressing the MEMORY button, press the VIDEO-1 button.
The name of the TV system which was chosen will be shown on the display for three seconds.
If you set to "AUTO", the unit will automatically select the video system used by the connected video device.
The on-screen function uses a monitor TV connected to the TX-SV727/R as a display, and is classified into two categories.

On-screen display

Immediate display
This is the indication shown when the input selector, the volume of the center/rear speakers or the surround mode is changed. The message will automatically disappear after 3 seconds. The following items will be shown on the display during the operation of the main unit.

a. When the power is turned on.
b. When the input selector is changed.
c. When the surround mode is changed.
d. When the delay time is changed.
e. When the MUTING is pressed on the remote control.
f. When the TEST is pressed on the remote control.
g. When pressing the CENTER ▲/▼ or REAR ▲/▼ on the remote control.

The menu screen
This is the display shown when the ENTER/ESCAPE button on the remote control is pressed.
The menu screen can be operated by means of cursor buttons on the remote control. The monitor TV should be connected to the unit to utilize this function.

Using the menu screen

This operation is performed using the remote control.
These buttons are used to set the Input Selector, the Rec Selector, the Surround Setup and the Screen Setup.

ENTER/ESCAPE button
- Used to select the menu screen.

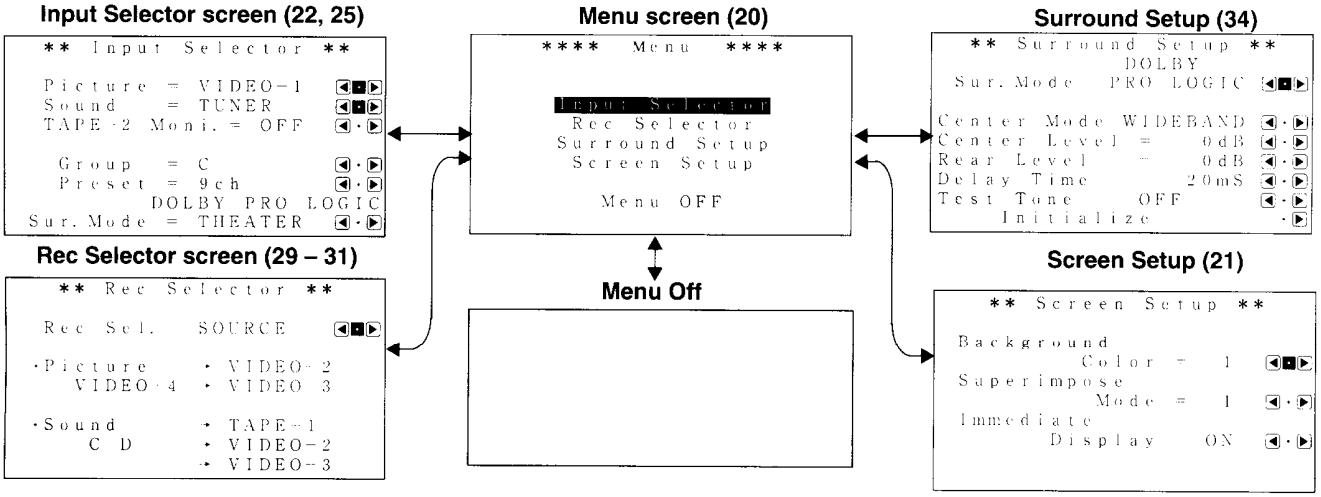
CURSOR buttons
▲▼: Used to move the cursor upward and downward on the screen.
◄►: Used to move the cursor to the left and right on the screen, and to change the parameters or select the items on which the cursor is located.
- Holding down the button will change the parameter or move the cursor continuously.
- Cursor is black and white reversed characters on the screen.

On-screen displays video images in the background when a video source is playing, and displays text on top of your selected colour on screen when nothing is being played back.
On-screen is output only to the MONITOR OUT terminal, not to the record terminal (out). Therefore, even if any On-screen is displayed on the monitor TV while recording, the On-screen display is not recorded.
Menu items on each screen differ according to the Surround mode etc. Pressing the ◄ or ► buttons while the cursor is on some items may display a separate sub-screen

The screen changes as follows

Please refer to the page inside the parentheses for details about each screen.

When an item is selected with the CURSOR buttons ▲ or ▼ on the Surround Setup screen and the ◄ or ► CURSOR buttons are pressed, another item may disappear, or in some cases the cursor may skip over some items.



Screen Setup menu

When you select the Screen Setup menu, the following display appears on the On-screen display.

Background color

You can select the background color among 8 colors. Select the number of the corresponding color from 1 to 8. The numbers correspond to the following numbers in the table.

1	2	3	4	5	6	7	8
Blue	Magenta	Red	Green	Cyan	White	Yellow	Black

Please note that the above color descriptions are standard descriptions. The actual colors may differ depending on the tone and brightness adjustments of the projector or TV used.

When there is an image input signal, the input signal will be used for the background. Therefore the background color which you have selected will not be displayed.

Superimpose Mode

It is possible to set the On-screen display so that it is easy to read when an image input signal is connected.

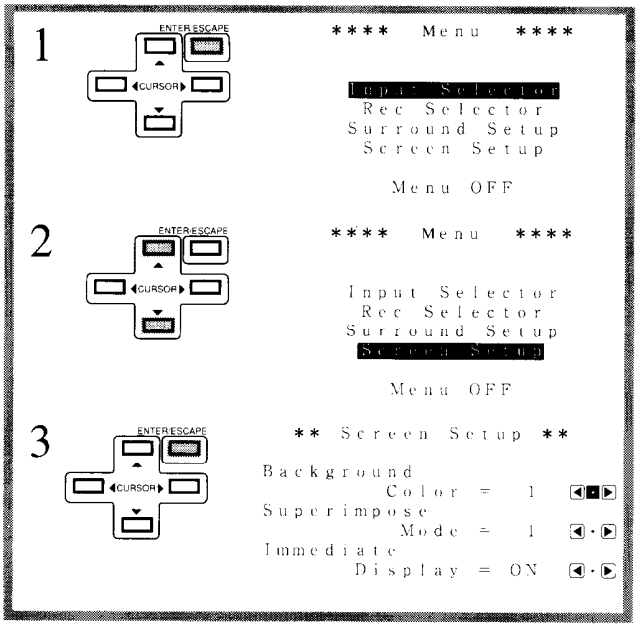
Mode 1: Normal

Mode 2: The image from the input signal is not displayed behind the lettering.

Mode 3: The image from the input signal is replaced with the back-ground color.

Immediate display

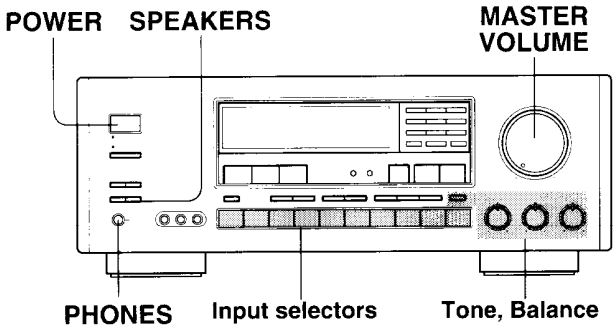
When Immediate display is set to ON, the Immediate display will be shown, and when it is set to OFF, the Immediate display will not be shown. When Menu Off is chosen, the selected background color will not be displayed. This can be useful when you don't want to display the message, or when you want to check the Auto/Manual tuning for TV/BS devices connected to the Image input.

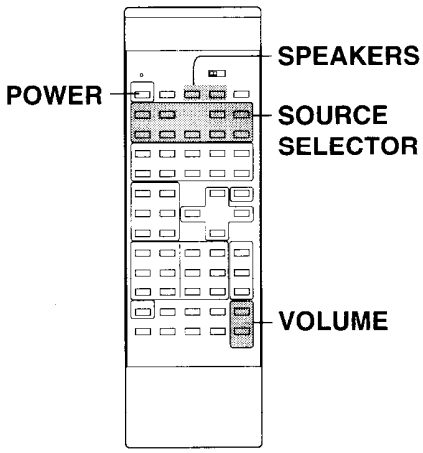


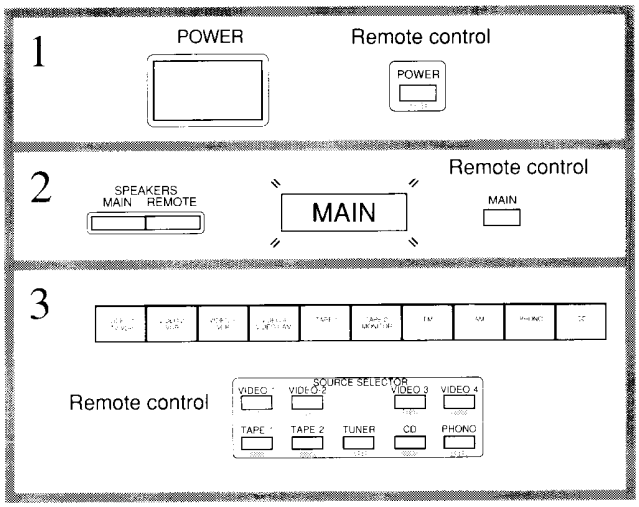
Basic operation

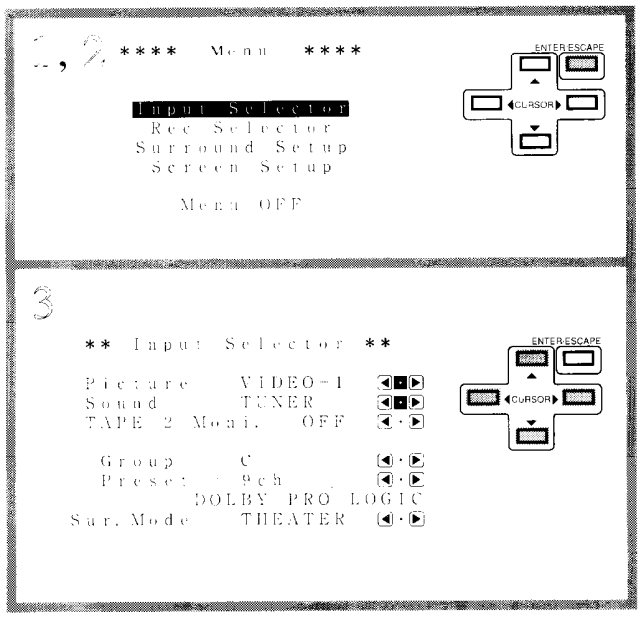
1. Press the ENTER/ESCAPE button.
2. Select the desired menu using the ▲ or ▼ CURSOR buttons.
3. Press the ENTER/ESCAPE button again.
4. Select the desired item using the ▲ or ▼ CURSOR buttons and change the parameters and conditions of the items using the ◄ or ► CURSOR buttons.
5. Press the ENTER/ESCAPE button after all the desired conditions have been input.
   - The screen will display the main menu.
6. Use the ▲ or ▼ CURSOR buttons to select Menu Off. Press the ENTER/ESCAPE button again to turn the Menu screen off.
   - Repeat steps 2 - 5 in order to use the other functions.

Listening to your favourite source









Basic operation

1. **Press the POWER button to turn on the power.**

2. **Press the MAIN speakers button.**
- MAIN indicator lights up.

3. **Press the desired input selector button.**
- Check the audio muting is off.

On screen

1. **Press the ENTER/ESCAPE button.**
The menu screen will be shown.

2. **Move the cursor to input selector and press the ENTER/ESCAPE button.**
The Input Selector screen will be shown.

3. **Select the desired input source.**
Move the cursor to the desired selection, for example Picture, Sound, etc., and press the ◄ or ► CURSOR button to choose the desired source.
Press the ENTER/ESCAPE button when the desired selection is displayed.

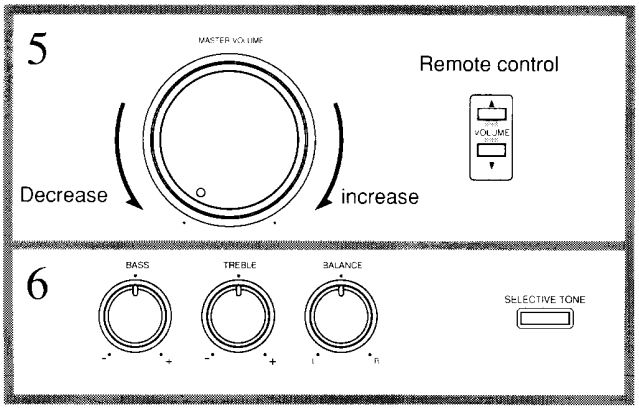
Picture
Indicate the input source of the picture.

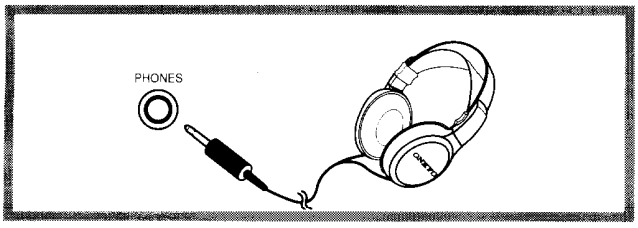
Sound
Indicate the input source of the sound. When you press the ◄ or ► cursor buttons while the cursors are both Picture and Sound, you can change the input source of the Picture and Sound at the same time. However if you select other than VIDEO-1 to 4 for the input source, the image will be fixed to the most recently selected video source so that only the sound changes.

TAPE-2 moni
Indicates TAPE-2 MONITOR ON/OFF.

Sur. Mode
Indicates surround mode.

- The button pressed will be shown on the display. For FM or AM reception, the band and the frequency will also be shown.
- Confirm that the TAPE-2 MONITOR indicator is off when a source other than the TAPE-2 MONITOR has been selected. Also check the audio muting is off.
- Please refer to the operations from page 32 onward in order to play the selected source with Surround.





4. **Start the selected input source playing.**
   - Follow the operating instructions of that unit.

5. **Adjust the volume to appropriate level using the MASTER VOLUME knob.**
6. **Adjust the tone controls**
   (See the following explanation)

Using headphones

Stereo headphones with a standard binaural (stereo) plug can be connected to the phones jack. The sound heard through the headphones is the sound from the Front speakers, but may sound a little different to what was heard from the speakers (it may sound relatively far away).

Explanation of the buttons

Power button (POWER) and STAND-BY/RECEIVED indicator

The STAND-BY/RECEIVED indicator comes on when the AC power cord for this unit has been inserted in an outlet.
This indicates that this unit is standing by for operation.
Press the power button will turn the main unit on, then this indicator goes off.
The indicator also lights when a signal is received from the remote control.

Speaker selector buttons (SPEAKERS MAIN/REMOTE) and indicators

MAIN button..... This button turns on or off the speakers connected to the MAIN, CENTER and REAR terminals.
When the speakers are turned on, the MAIN indicator lights up.
REMOTE button ..... This button turns on or off the speakers connected to the REMOTE terminals.
When the speakers are turned on, the REMOTE indicator lights up.
Turn on these speakers when using multi source. (See page 40, 41.)

Master volume control knob (MASTER VOLUME)

Use this knob to adjust the volume of the Front, Main, Center, Rear (Surround) speakers.
To adjust the volume level while the Surround effects or the multi-source are being used, refer to each section:
Using the surround effects (see page 35, 36)
Using the multi-source (see page 40, 41)

Tone and balance controls

Treble and bass and selective tone are effectively only for the Front L and R speakers.
The best results are obtained from DOLBY PRO LOGIC Surround when the center and front L and R speakers contain the same amounts of mid and high frequencies. As the treble and bass control do not affect the Center speaker, adjust the tone controls for the Front L and R speakers to match the sound given by the Center speaker. Because of this, we recommend the use of a good quality center speaker.

Bass control knob (BASS)

Adjust to strengthen or weaken bass response.

Treble control knob (TREBLE)

Adjust to strengthen or weaken treble response.

Selective tone control button (SELECTIVE TONE) and indicator

The selective tone control is used to clearly reproduce ultra low and high frequencies, and only affects the Front speakers.

Balance control knob (BALANCE)

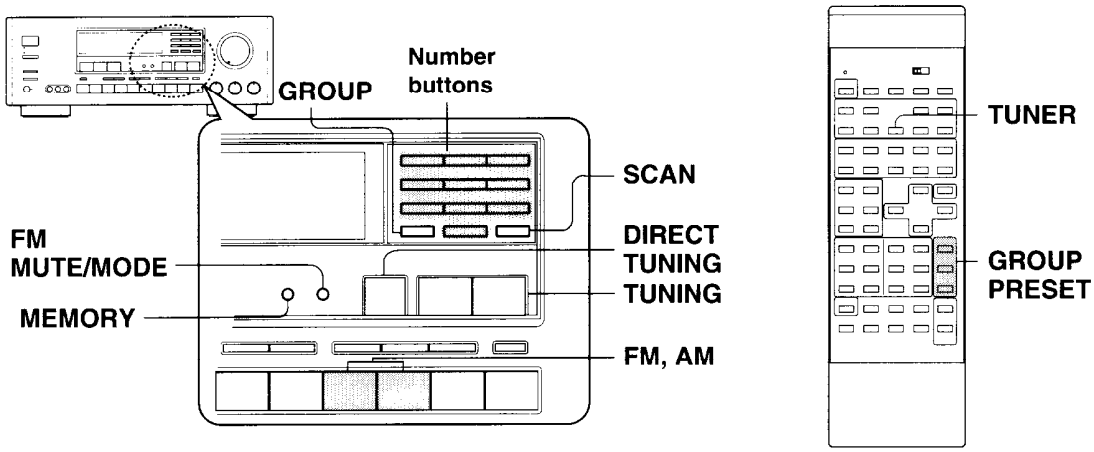
Use the balance control knob to adjust the relative volume levels of the right and left Front Main speaker systems. This adjusts the relative volume level of the Front Main speakers only.

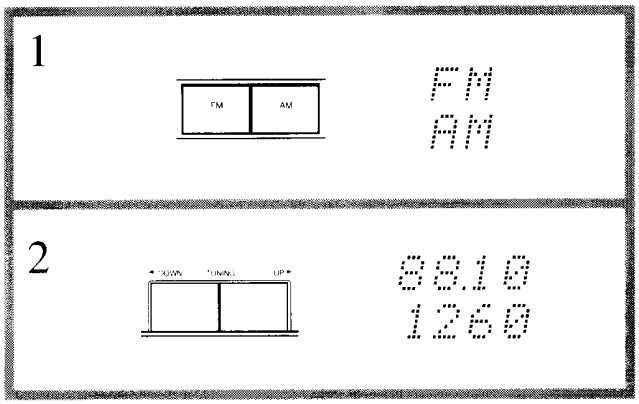
Dimmer button

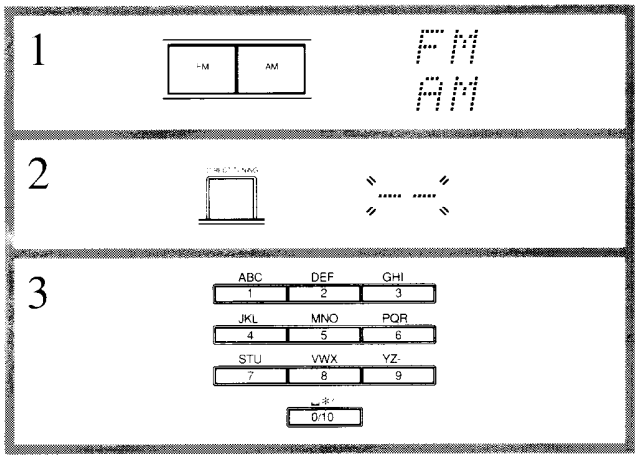
This button can be used to change the brightness of the display.
The brightness changes in four steps: bright, medium, dim, off.

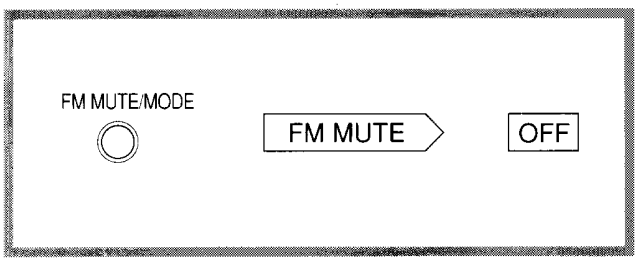
Using the tuner

Please make sure that the TAPE-2 MONITOR indicator is off and audio muting is off.









Tuning the radio (Manual tuning and Direct tuning)

When the frequency is not known-Manual tuning

1. **Press the FM or AM button.**
2. **Use the ◄ DOWN TUNING UP ► buttons to change the frequency.**
   UP ..... the frequency increases.
   DOWN .. the frequency decreases.

- The frequency is changed in 50kHz steps in FM and 10 kHz (or 9kHz) in AM when the tuning selector button is pressed in single steps.
- If this button is held continuously for more than 0.5 seconds, the frequencies are scanned automatically. (FM auto tuning mode)
  When a broadcast is received, scanning stops.

When the frequency is known-Direct tuning

1. **Press the FM or AM button.**
2. **Press the DIRECT TUNING button.**

- The "-- --" will flash 16 seconds in the frequency display.

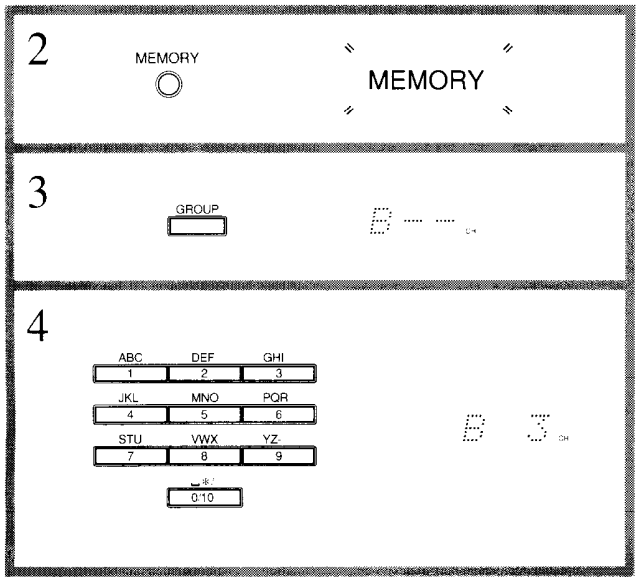
3. **Enter the frequency with the number buttons while the cursor are flashing.**

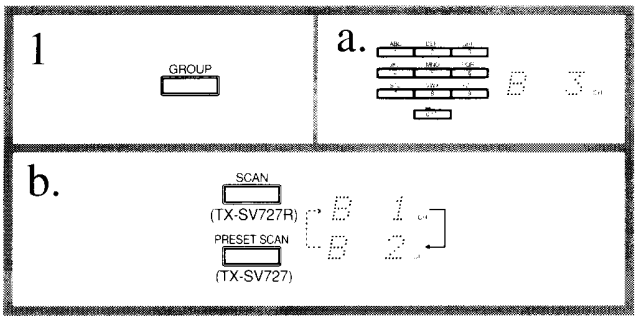
Example: 88.10 MHz 8 → 8 → 1 → 0/10

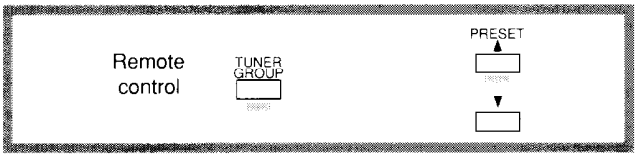
- When receiving AM broadcasts with a 9 kHz step (this depending on your region), you can enter the frequency directly.
- With 10 kHz steps, entering a number for the 10 kHz digit will set the 1 kHz digit automatically to 0.
- If you enter a frequency that does not have a station, this unit will automatically tune to the next station immediately below that station.
- If you enter a frequency that is out of range, this unit will return to the previous frequency. If this happens, repeat the procedure.

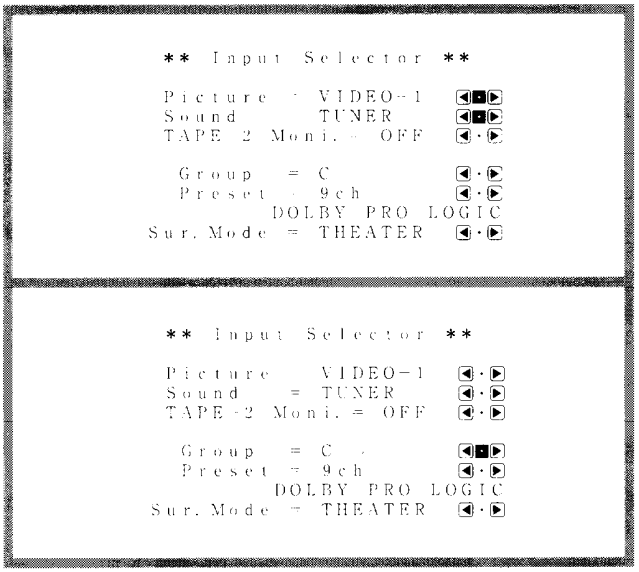
Listening to a stereo radio stations (FM only)

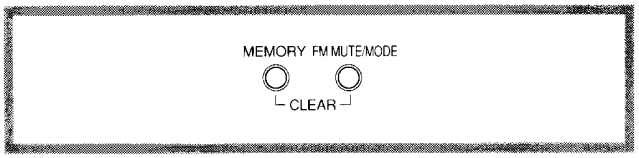
If you tune in a stereo FM station, the STEREO indicator will be illuminated if the signal is sufficiently strong.
If the signal is weak, it may be impossible to tune into your desired station. In this case, tune in as follows.
Press the FM MUTE/MODE button and FM MUTE OFF lights. At this time, the station will be in mono and interstation noise will be heard. Select the station you want listen to.











Using preset stations

Since ten FM or AM stations can be stored in each group (A, B or C), a total of 30 stations can be stored in the memory.

Programming radio station

1. **Select the frequency that you want to store in the memory.**
   (See page 24 Tuning the radio)
2. **Press the MEMORY button.**
- The MEMORY indicator will light for 8 seconds.
3. **While the MEMORY indicator is lighting, press the GROUP button to choose the desired group.**
- The group shown on the display changes in the following order each time the button is pressed: A → B → C →A.
4. **Select the desired memory number using the number buttons.**
- Press button 0/10 when choosing memory number 10.

NOTE:
If the FM station received is an RDS station with a PS (Program Service Name), the frequency display will change to the PS display. If there is no PS, the frequency display will not change (TX-SV727R)
(Refer to page 26 – 28 for the RDS function)

Selecting preset stations

Main unit

1. **Press the GROUP button to select the desired group.**

a. Input the memory number you wish to receive by using the number buttons.
b. Press the SCAN (or PRESET SCAN) button.

Each station stored in the class chosen in step 1 will be received for 5 seconds (for each station).
When the station that you want is found, press the SCAN (or PRESET SCAN) button again and scanning will stop.

Remote control

1. **Press the GROUP button and choose the group.**
2. **Press the PRESET (▲ or ▼) button.**

After the last number of GROUP C is reached, scanning will restart at GROUP A.

On screen

1. **Press the ENTER/ESCAPE button and the MENU screen is displayed.**
   Move the cursor to Input Selector and press the ENTER/ESCAPE button.
2. **Move the cursor to Sound and press the ◄ or ► CURSOR button to select Tuner.**
   Select the desired channel using the Group and Preset buttons.
   Group
   Indicates the current group of the TUNER preset memory (A to C). Pressing the ◄ and ► CURSOR buttons will change the group. When the group is changed, the number shown below the new class will indicate the last channel that was selected for that group. If there are no channels set on that group at all, that group will be skipped entirely.
   Preset
   Indicates the channel preset for the selected group of the TUNER. Pressing the ◄ CURSOR button will change the channel downward, and pressing the ► CURSOR button will change the channel upward.

NOTE:
If no preset channels are set in any group, the group and preset indications will not change, as there are no presets to select.

Cancelling preset stations

1. **Select the station that you want to cancel as explained in the previous section.**
2. **Press the FM MUTE/MODE button while holding down the MEMORY Button.**
   "--" will be shown on the MEMORY channel display.

Receiving RDS (TX-SV727R only)

RDS reception is only available on the TX-SV727R model, and only in areas where RDS broadcasts are available.

What is RDS?

Many FM stations now transmit RDS signals which give additional information. RDS provides you with various services so that (for example) you can choose a station broadcasting your favorite categories of music, or other information. The information on the right side is available on this unit.

NOTE:
In some cases, the characters displayed on the display of the TX-SV727R may not be exactly the same as the ones broadcast by the radio station. If strange characters appear in the display, it is because characters are being received that cannot be correctly displayed by the TX-SV727R. They do not indicate a malfunction of the unit.

PS: Program Service Name
When an RDS station broadcasting PS information is received, the name of the station will be displayed instead of the frequency.

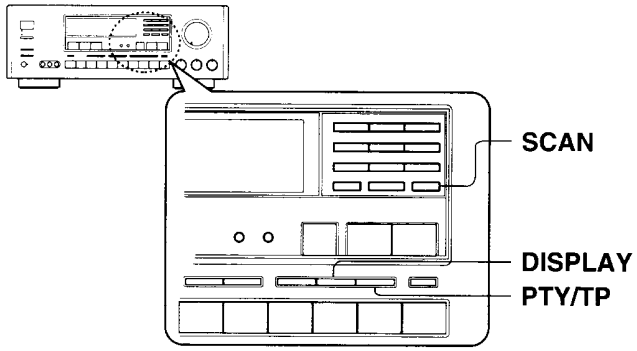
PTY: Program Type
When an RDS station broadcasting PTY information is received, the type (category) of the broadcast will be displayed.

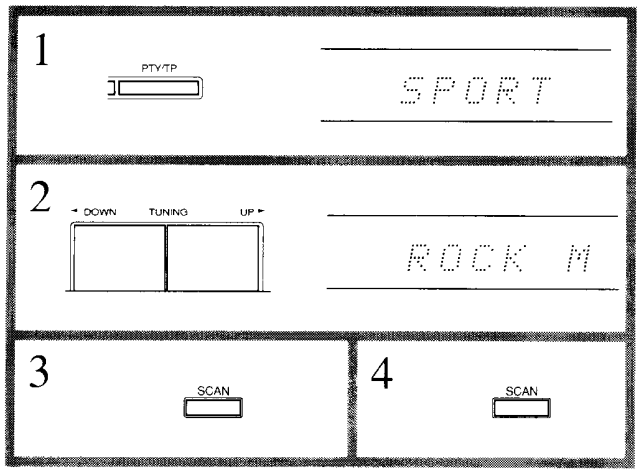
TP: Traffic Program
When an RDS station broadcasting TP information is received, the traffic information will be displayed.

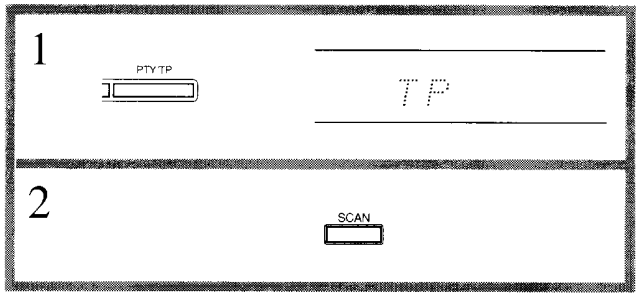
RT: Radio Text
When an RDS station broadcasting RT information is received, the information received from the station will be shown on the display.

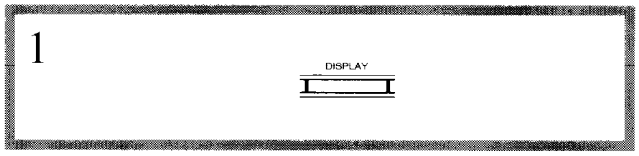
PTY Classifications in Europe

0	NONE	**None**	(No PTY display)
1	NEWS	**News reports**	Reports on current events and happenings.
2	AFFAIRS	**Current affairs**	Topical reporting of current affairs, often with a wider range of topics than news reports.
3	INFO	**Information**	General information such as weather forecasts, consumer affairs , medical help etc.
4	SPORT	**Sport**	Live sports action, sports news and interviews.
5	EDUCATE	**Education**	Formal educational programs.
6	DRAMA	**Drama**	Radio plays and serials
7	CULTURE	**Culture**	Cultural programs (including religious affairs)
8	SCIENCE	**Science and technology**	Programs about the natural sciences and technology.
9	VARIED	**Varied**	Speech based programs not covered by the above categories eg. quizzes, panel games, comedy, etc.
10	POP M	**Pop music**	Popular commercial music, usually included in past or present sales charts.
11	ROCK M	**Rock music**	Popular music with a more specialist appeal, often not included in sales charts.
12	M O R M	**Middle of the road music**	Easy listening music as opposed to Pop, Rock or Classical.
13	LIGHT M	**Light classics**	Classical music for general rather than specialist appreciation.
14	CLASSICS	**Serious classics**	Performances of major orchestral works, symphonies, chamber music etc. and including Grand Opera.
15	OTHER M	**Other music**	Music styles not covered by the above categories, eg. Jazz, Rhythm & Blues, Folk, Country, Reggae.









How to search for a station which broadcasts your favorite category (PTY scan)

1. **Press the PTY/TP button, to select "PTY".**
   If the station you are receiving is not broadcasting RDS, "Not RDS" (this is not an RDS station) will be shown on the display.
2. **Use the ◄ DOWN TUNING UP ► buttons to select the programme type (PTY) (for example, "ROCK M").**
   See the PTY description on the previous page.
3. **Press the SCAN button to start searching for the chosen PTY station.** When a station is received with the desired PTY, the scanning stops for approximately 5 seconds, before the unit starts scanning again.
4. **When the desired station is reached, press SCAN button again to stop scanning.**

Receiving RDS traffic information

1. **Press the PTY/TP button to select "TP".**
   If ♯TP♯ is shown on the display, it indicates that the current station is broadcasting traffic information.
2. **Press the SCAN button to start searching for a TP station.**
   When the unit receives a TP station, it stops scanning. If the unit cannot receive any TP station, "Not find" (cannot find the station) is shown on the display.

Displaying Radio Text (RT)

If the station you are listening to is not an RDS station, this function cannot be used.

1. **Each time you press the DISPLAY button, the display changes as follows.**

Frequency → Character or Programme Service Name → Radio Text → Frequency

If the current station you are listening to is not an RDS station, only the frequency of the station and the characters (see pages 23) appears. (If there have been no characters entered, only the frequency is shown.)

When RT is received, it can sometimes take up to 15 seconds (more or less) to show RT on the display.

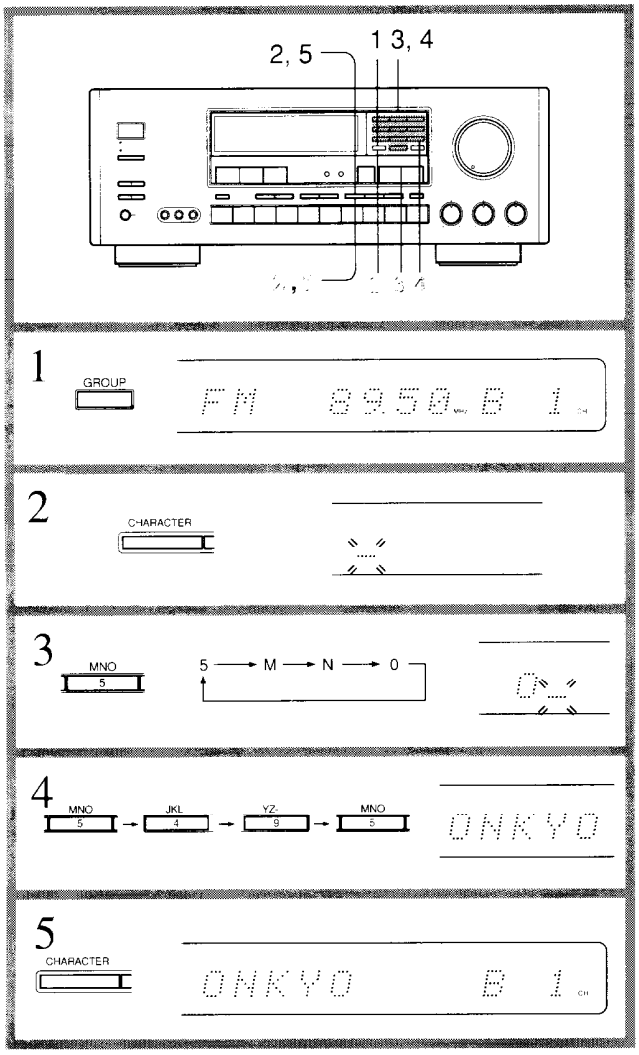
Sometimes the following messages will be shown on the display.

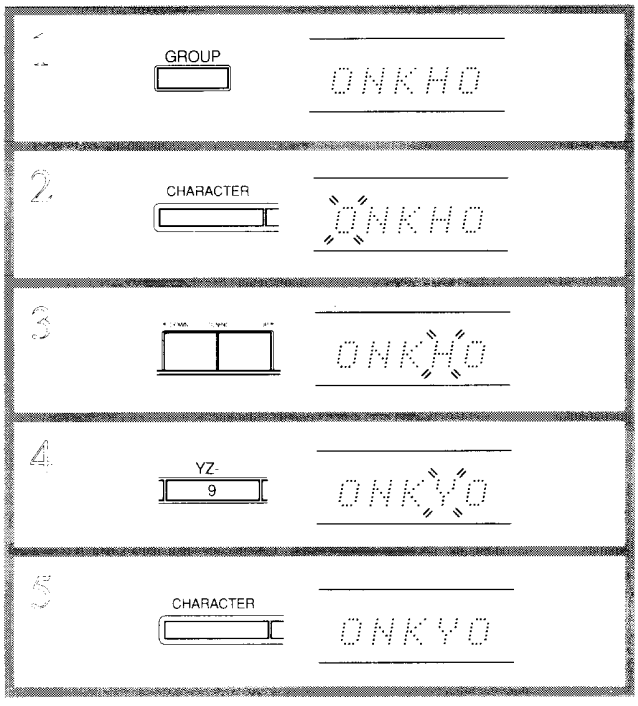
Wait: indicates that it requires more time to receive the RT information. When the information is received, the characters will scroll across the display.

No text: this appears for 3 seconds and indicates that even though an RDS station is being received, there is no RT information included.

Entering station names (TX-SV727R only)

Characters can be entered during reception of an FM or AM broadcast station.
This function enables you to memorize a maximum of 8 characters consisting of letters, some symbols and numbers, for instance, representing broadcasting names, for each preset station.
If you attempt to enter characters while receiving an FM broadcast RDS station, "RDS...PS" is displayed and characters cannot be entered.





Characters which can be input

A B C D E F G H I J K L M N O P Q R S T U V W
X Y Z 1 2 3 4 5 6 7 8 9 0 - ␣ * /

Note: ␣ indicates a space.

Entering new characters

To name 1CH of GROUP B as "ONKYO", for example, operate as follows. (Example: FM broadcast at 89.50 MHz has been memorized into 1CH of GROUP B).

1. **Press the GROUP and number button.**
   The memorized broadcast station is received.
2. **Press the CHARACTER button.**
   The frequency in the display goes off and "_" flashes.
3. **To enter O from "ONKYO", press the 5MNO button.**
   Pressing the button each time changes the character from 5 to M, N, and O, one at a time. Select O.

- "_" will move to the next character. (If you do not press the number button for one second or more, "_" will automatically move to the next position.)
- When you want to delete a character, press the DIRECT TUNING button. The character is deleted, and the characters on the right move to the left by one space.

4. **Repeat step 3.**
   To enter N from "ONKYO", press the 5MNO button and select N.
   To enter K from "ONKYO" press the 4JKL button and select K.
5. **Press the CHARACTER button.**
   If you have not pressed a button for 16 seconds, the operation will complete automatically.

Clearing all of the characters stored in memory

1. **Press the CHARACTER button.**
2. **While pressing the MEMORY button, press the FM MUTE/MODE button.**
   All the characters entered for this station will be cleared.

Changing existing characters

1. **Press GROUP buttons to recall the desired preset number.**
2. **Press the CHARACTER button.**
   "_" appears below the first character and the two begin flashing.
3. **Press the ◄ DOWN TUNING UP ► button and move "_" to the character you want to change.**
   "_" moves to the right when pressing the UP ► button and moves to the left when pressing the ◄ DOWN button.
4. **Enter the desired character.**
   The previous character is replaced with a new character.
5. **Press the CHARACTER button.**

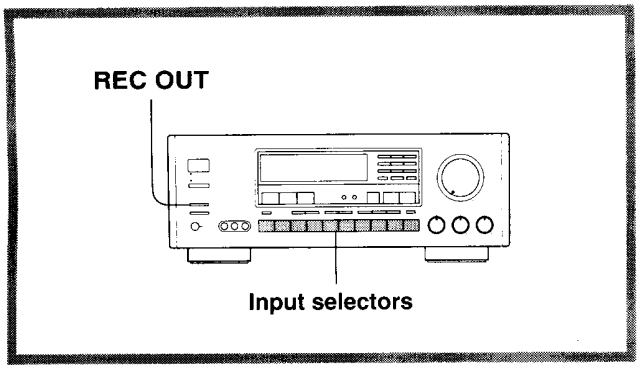
Recording a source

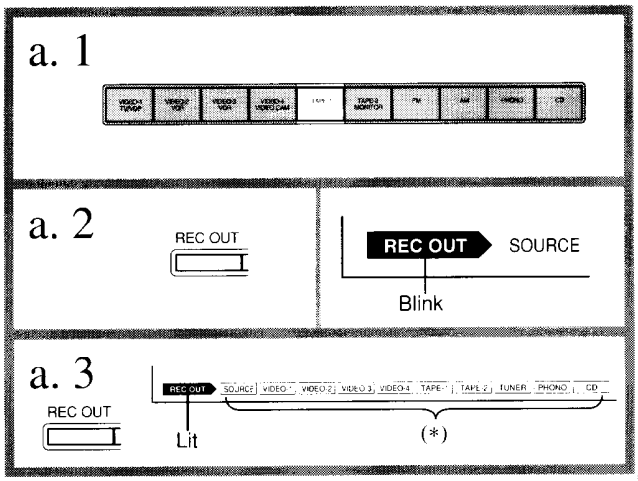
Recording an audio source

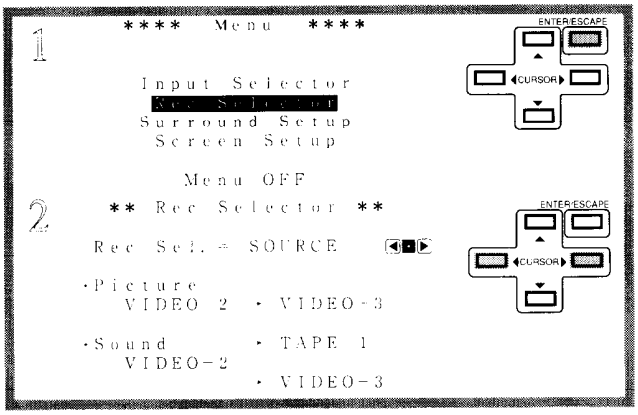
Tape recording

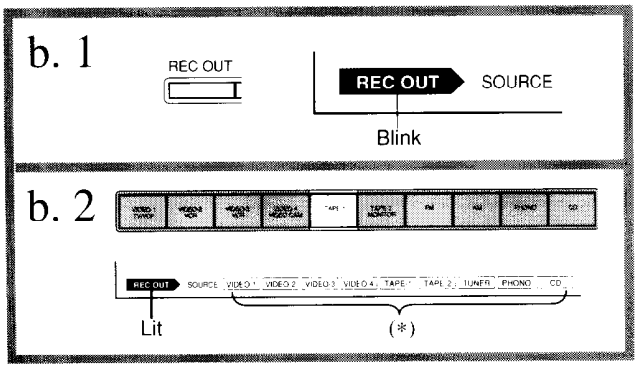
With this unit you can perform recording while listening to the sound of another source through speakers or headphones. Make all connections between the tape deck and the unit as shown in the System Connections diagram (page 10).

When recording a tape while the Multiple Room Remote Control is connected, turn the MR off (the MR OFF indicator will light) to disable remote control operation from another rooms.









Recording and dubbing to a tape deck connected to TAPE-1

a When recording the same source you are listening to

Main unit

1. **Press the input selector button to select the source to be recorded. (Other than TAPE-1)**
2. **Press the REC OUT button.**
3. **Press the REC OUT button again while the REC OUT indicator is flashing.**
   - The SOURCE and the source you have chosen will be displayed in red boxes. (*)
4. **Start the device selected in step1 while setting the tape deck connected to TAPE-1 to recording mode.**

On screen

1. Select the Rec Selector screen from the Menu screen.
2. Move the cursor to Rec Selector and Press the ◄ and ► CURSOR button to select SOURCE.

Rec Sel:

Indicate the recording selector. When you press the ◄ or ► CURSOR buttons, the recording source of the sound and the picture will change.

Picture, Sound:

Indicates which picture and sound sources are available to be recorded, and which devices are available up record onto.

For example (See the diagram at the left.)

The recording source for the Picture is VIDEO-2, and this source can only be recorded to VIDEO-3.

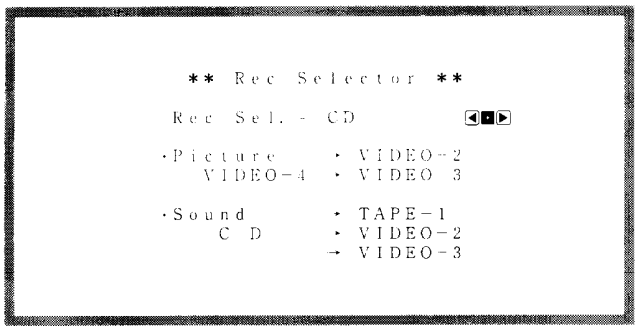
The recording source for the sound is VIDEO-2, and this source can only be recorded to devices connected to TAPE-1 or VIDEO-3.

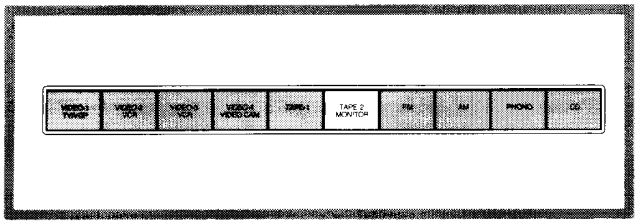
NOTE:

- Never change the positions of any controls on this unit during recording and dubbing operations.
- Pressing the input selector button during recording will change the source being recorded.
- When the TAPE-2 MONITOR indicator is on, only TAPE-2 can be recorded and if the input selector is changed, the TAPE-2 MONITOR indicator will not change.

b. When recording a source different from the one you are listening to

1. **Press the REC OUT button.**
2. **Press the input selector button for the source to be recorded, (Other than TAPE-1) while the REC OUT indicator is flashing.**
   - The chosen source will be displayed in a red box. (*)
3. **Start the device selected in step2, and start recording on the tape deck connected to TAPE-1, or on any recording device connected to the VIDEO-2 or VIDEO-3 audio output jacks.**





On screen

1. **Select the Rec Selector screen from the Menu screen.**
2. **Move the cursor to Rec Selector and Press the ◄ and ► CURSOR buttons to select the source to be recorded.**

Note:

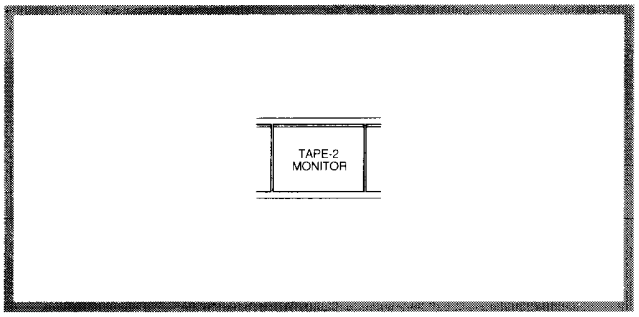
- The source you selected to record will be output form the TAPE-1, VIDEO-2 and VIDEO-3 REC OUT jacks. The source you are listening to does not change.
- If you choose to record from FM or AM while listening to another source, the tuner's frequency and group displays will be shown for 3 seconds.

Recording and dubbing to a tape deck connected to TAPE-2

1. **Press the input selector button of the source to be recorded. (Other than TAPE-2)**
2. **Start playing back the device selected in step 1, and start recording on the tape deck connected to TAPE-2.**

Note:

- When the TAPE-2 MONITOR is off, any source signals can be monitored through the speakers or the headphones (this is normal operation).
- If tape deck 2 is 3-head type however, you can monitor the recording directly of the tape by turning TAPE-2 MIONITOR on. Refer to the tape deck instruction manuals for more details. Set the recording level using the controls on the tape deck used for recording.



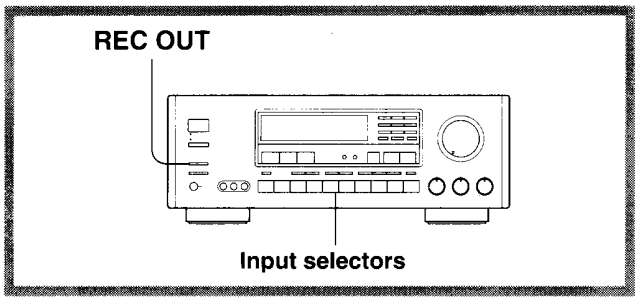
Using the graphic equalizer

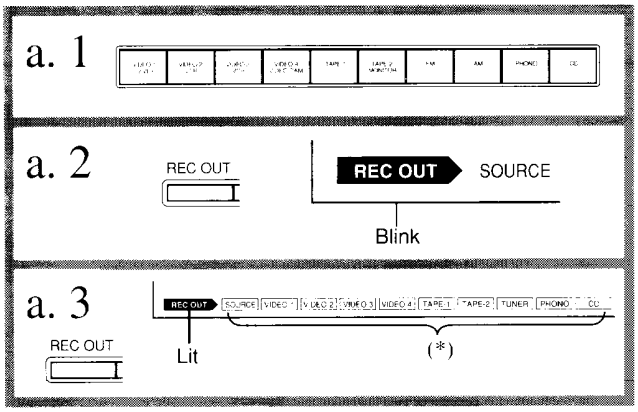
1. **Connect the graphic equalizer to the TAPE-2 jacks on the rear panel.**
2. **If a second tape deck is used, connect it to the tape jacks on the graphic equalizer.**
3. **Press the TAPE-2 MONITOR button to turn on the TAPE-2 MONITOR indicator.**

Follow the graphic equalizer operation instructions.
To record an equalized signal, use the tape deck (connect to the equalizer) for recording.

VCR recording

Date can be recorded from video-disc players, video cassette recorders connected to VIDEO-2 and 3.
Connect the VCR to VIDEO-2, and/or VIDEO-3.
Refer to each instruction manual for information concerning video-disc players, video camcorders, video cassette recorders and monitor TV.

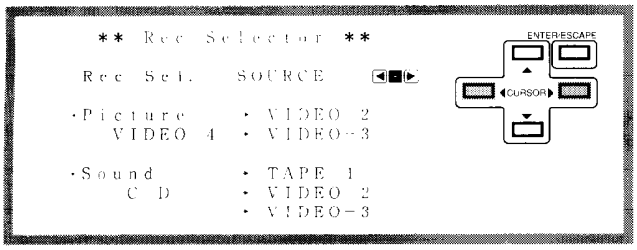




Recording to VIDEO-2 and VIDEO-3

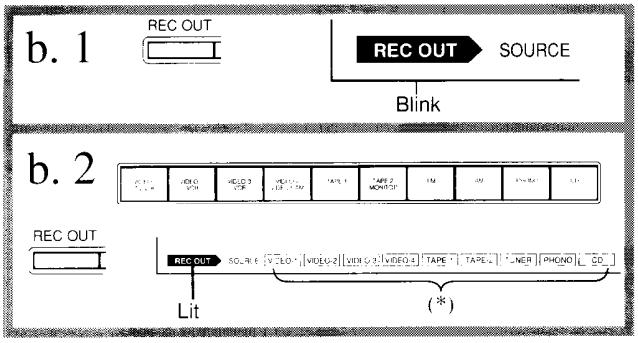
a. Recording the source being played back.

1. **Select the source to be recorded with the input selector buttons.**
2. **Press the REC OUT button.**
3. **Press the REC OUT button again while the REC OUT indicator is flashing.**
   The SOURCE and the source you have chosen will be displayed in red boxes. (*)
4. **Start the source selected in step 1, and start recording on the VCR connected to VIDEO-2 and/or VIDEO-3.**



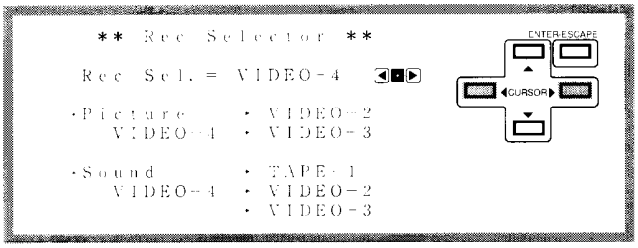
On screen

1. **Select the Rec Selector screen from the Menu screen.**
2. **Move the cursor to Rec Sel and press the ◄ and ► CURSOR button to select SOURCE.**



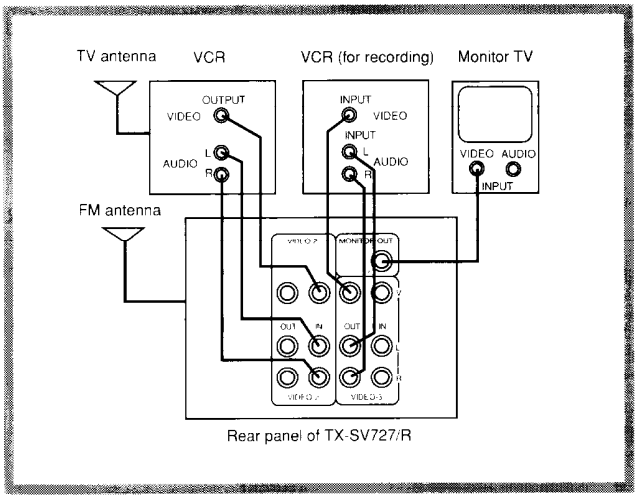
b. Recording a source different from the one being played back

1. **Press the REC OUT button.**
2. **Press the input selector button of the source to be recorded while the REC OUT indicator is flashing.**
   The chosen source will be displayed in a red box. (*)
3. **Start the source selected in step 2, and start recording on the VCR connected to VIDEO-3.**



On screen (Refer to page 20)

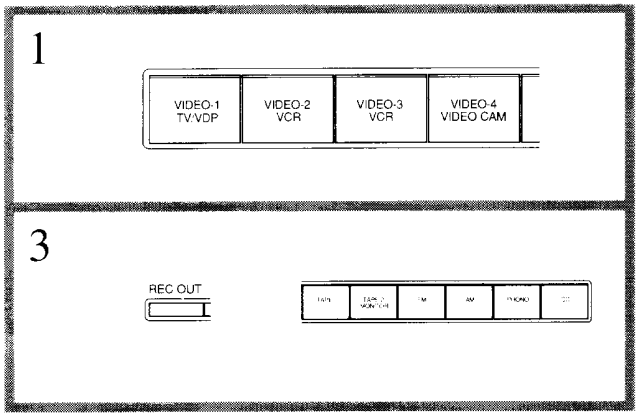
1. **Select the Rec Selector screen from the Menu screen.**
2. **Move the cursor to Rec.Sel and press the ◄ and ► CURSOR buttons to select the source to be recorded.**



Playback and recording of TV picture and FM/CABLE TV sound

Recording of a TV broadcast and FM broadcast (simulcast) is possible when two VCR are used.

1. **Receive the TV broadcast using the VCR tuner.**
2. **Press the VIDEO-2 or -3 input selector to set the picture to VIDEO-2 or -3.**
3. **Press the FM Input Selector and tune in the FM simulcast using a preset button or the tuning selectors.**
   The picture will be sent to the monitor TV and the FM stereo sound to the speakers connected to this unit.
4. **To record the TV picture with FM sound, receive the TV broadcast using one VCR (connected to VIDEO-2 (or 3)) and begin recording on the other VCR (connected to VIDEO-3 (or 2)).**
   The program can be monitored during recording.

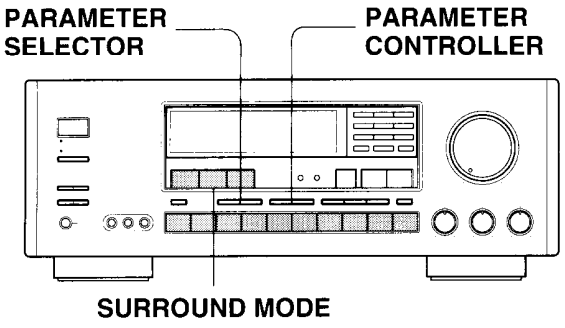


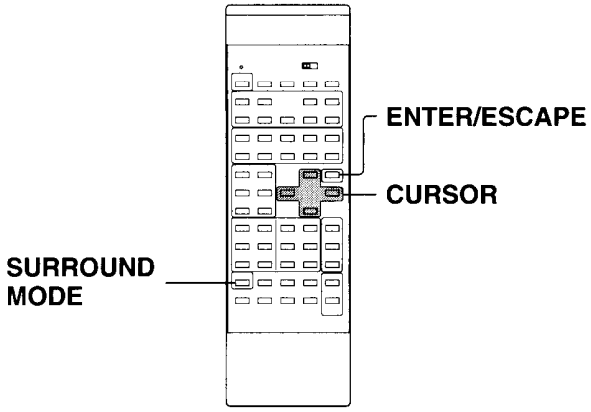
Mixing video and audio for VCR recording

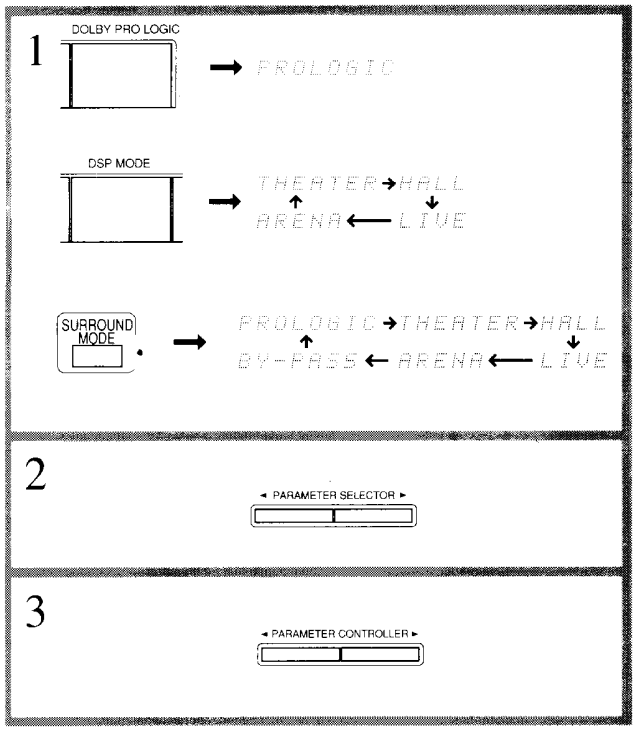
1. **Press the Input Selector button to select the VCR (VIDEO-1, 2 , 3 or 4) that will be used to play the video.**
2. **Press the REC/PAUSE button on the VCR (VIDEO-2 or 3) that will be doing the recording.**
3. **Press the REC OUT button.**
4. **Press the Input Selector button (CD, PHONO, FM, AM, TAPE-1, or TAPE-2) that will provide the audio source.**
   The picture will be left as is. Only the audio will be changed.
5. **Start operation of the equipment.**
   The picture will be recorded from the video source, and the sound from the audio source.

Basic operation of Surround play

Step 4 on page 23 "Listening to your favorite source" should be followed by the following basic operations.
Although full details of each Surround mode will be explained on page 33, please be sure to understand the following basic operation first.







Operating Surround

1. **Press the DOLBY PRO LOGIC button to select Dolby Pro Logic surround mode.**
   Press the DSP MODE button to select Theater, Hall, Live or Arena surround mode.
   Using the remote control, press the SURROUND MODE button to select surround mode.
   - Each time the button is pressed the mode changes as pictured and is shown in the display section.
   - Each mode has a number of details (parameters) which affect the sound of the mode.
2. **Press the ◄ and ► PARAMETER SELECTOR buttons to select the parameter you want to change.**
   - Displayed in the display section for 5 seconds.
   - If the display goes out, you can press the PARAMETER SELECTOR button again.
   - The particular parameters change depending on which Surround mode you are in.(See page 33)
3. **Use the ◄ and ► PARAMETER CONTROLLER buttons to select a value for the parameter.**
   - Adjust the parameter by repeating steps 2 and 3, and referring to the parameter selector list.
   - The adjusted parameter is stored in the memory for the surround mode you set it in.
   - When you are not playing in surround:

press the BY-PASS button on the main unit or
press the SURROUND MODE button on the remote control to select By-Pass.

- When using the multi-source, the surround mode will be turned off.
- Refer to page 34 using the on screen display.

Use of surround mode

This unit is provided with 5 kinds of Surround modes. Select a mode by pressing the DOLBY PRO LOGIC button, DSP MODE button or BY-PASS button. (When using the remote control, press the SURROUND MODE button.) Make your choice of modes depending on the type of music you are listening to, the media used, and your personal preference.

Surround mode

Dolby Pro Logic
By using video tape and laser discs with the DOLBY SURROUND trade mark. You can decode four channel surround sound.

Theater
There are many surround speakers in an actual theater. Use this mode for creating a theater atmosphere. This mode is suitable for playback of media recorded with Dolby Surround.

Hall
Simulates the atmosphere of a concert hall. Intended for classical music.

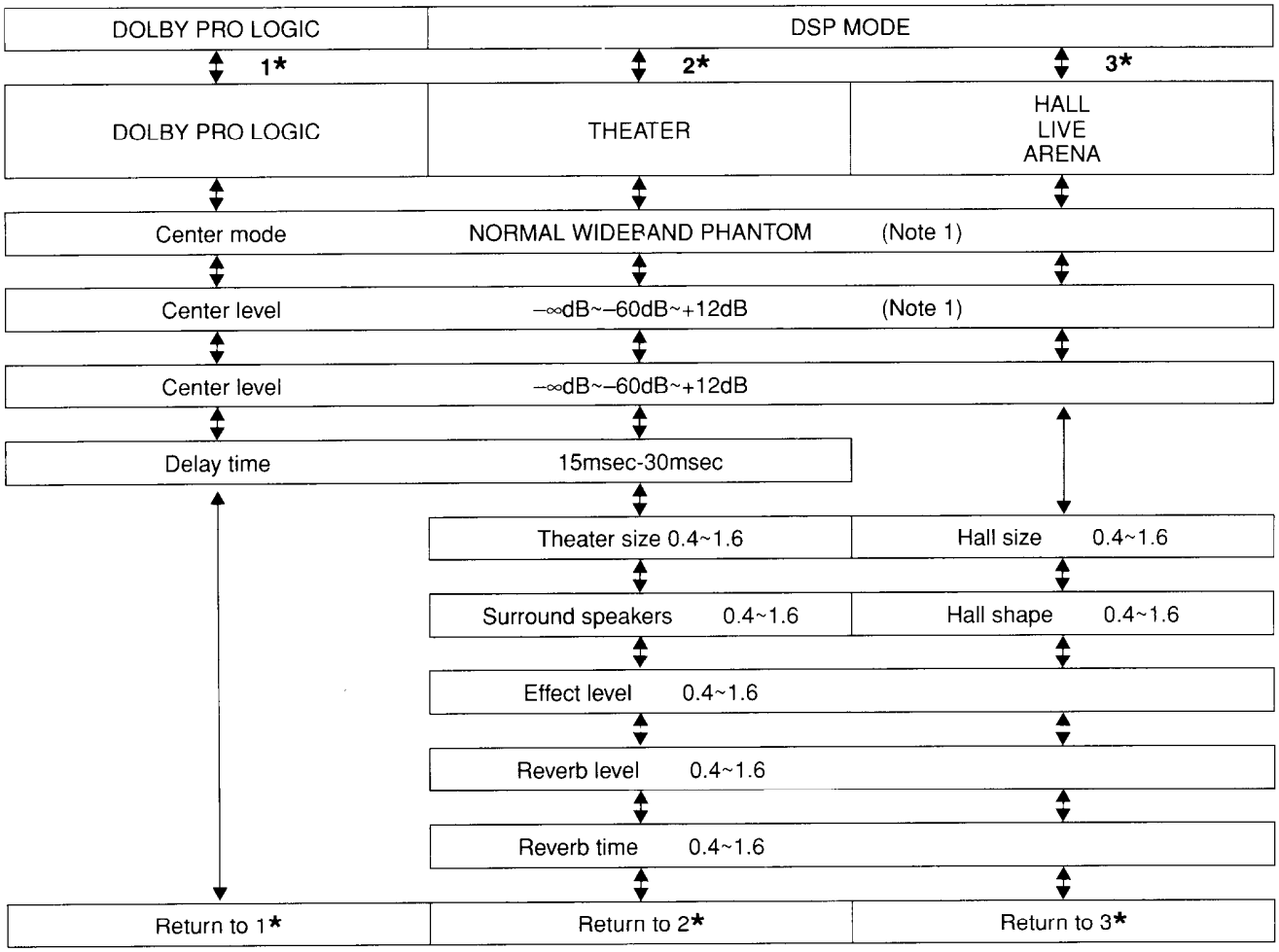
By-Pass
This is the mode used when you do not wish to use the sorround mode. All input sound is output from the front speakers directly.

Arena
This mode recreates the feel of listening to a pop concert in a domed stadium.

Live
Reproduces the feeling of a live performance.

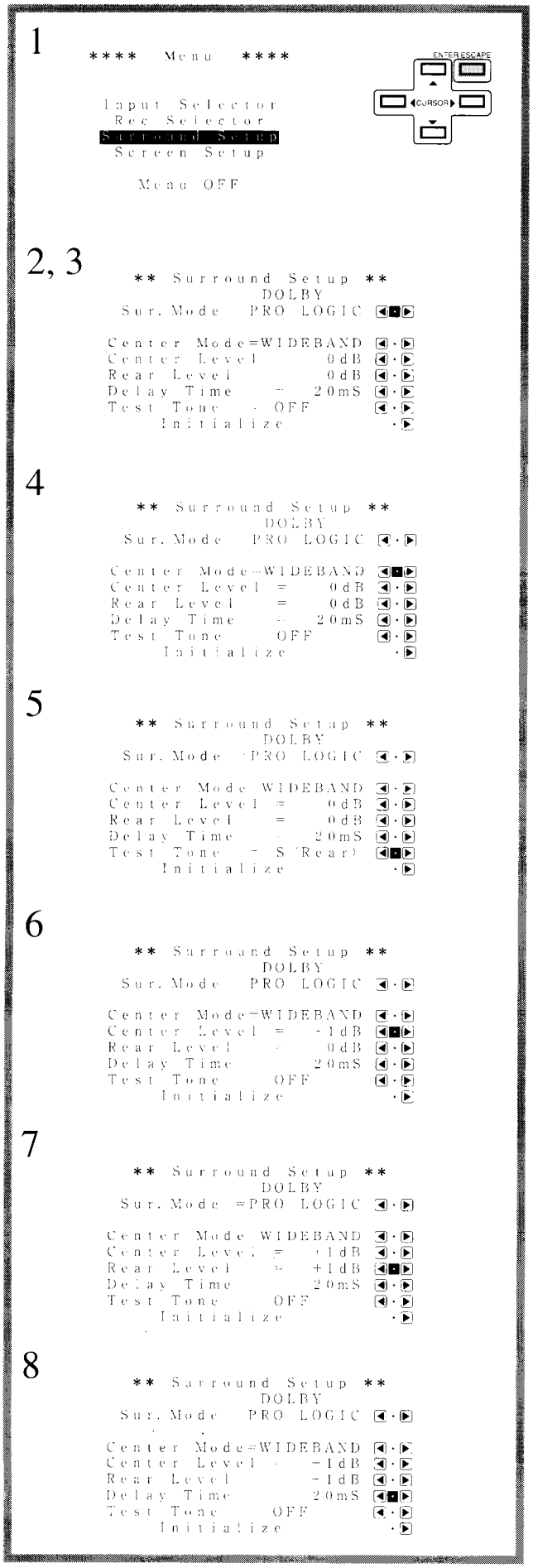
The Parameter selector

This chart shows how the display changes when the PARAMETER SELECTOR buttons are pressed. Pressing the ◄ PARAMETER SELECTOR button goes to the upper items and pressing the ► button goes to the lower items. Pressing the PARAMETER CONTROLLER button in each display can change the value and condition of which ever parameter is displayed.



NOTES:

- The Center mode does not have an independent value and position in each Surround mode. However, each of the other items have independent value and position in each Surround mode. (Note 1)
- This item is not available when Center Mode is set to PHANTOM. (Note 2)

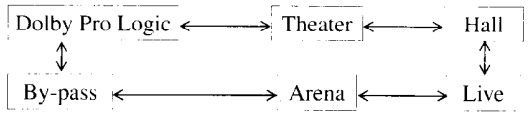


Setting the surround parameters using on screen

- Press the ▲ or ▼ CURSOR buttons to select the item you wish to change.
- Press the ◄ and ► CURSOR buttons to change the value.
- After adjusting the value press the ▼ CURSOR button or ENTER/ESCAPE button.
- Some items allows you to select values visually by looking at the sub screen.

Setting the Dolby Pro Logic surround parameters

1. **Press the ENTER/ESCAPE button to enter the menu screen.**
   - Move the cursor to Surround Setup and press the ENTER/ESCAPE button.
2. **Surround Setup**
   The menu for setting the surround parameters is displayed.
3. **Sur. Mode (See page 37 – 40)**
   Choose the surround mode.
   Move the cursor to Sur. Mode and press the CURSOR ◄ or ► button to select surround mode.

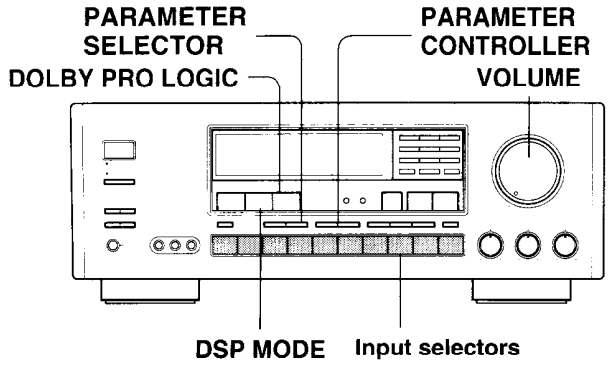


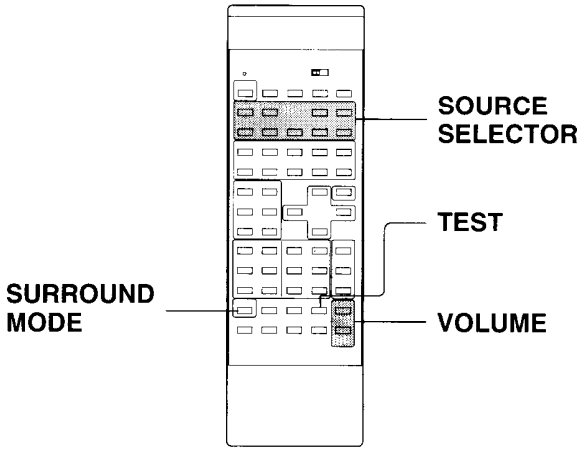
4. **Center Mode (See page 36)**
   Choose the center mode according to the size of the speakers.
   Move the cursor to Center Mode and press the CURSOR ◄ or ► button to select the center mode.

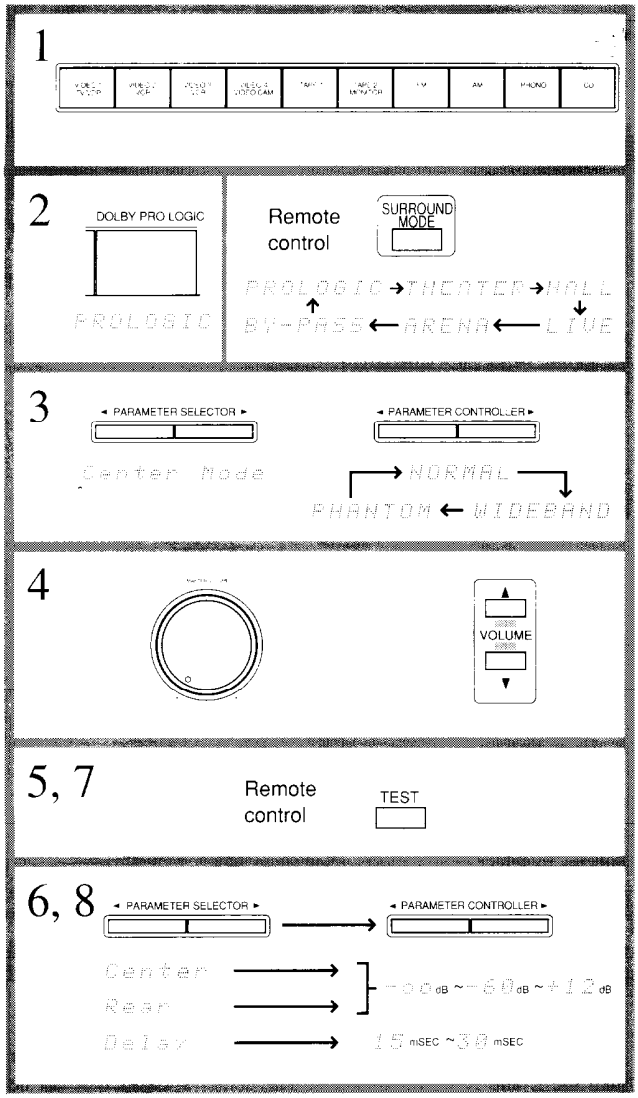
5. **Test tone (See page 37)**
   Use the test tone to adjust the level of the speakers.
   Move the cursor to Test Tone and press the ◄ or ► CURSOR button to choose the type of test tone.
6. **Center Level (See page 37)**
   Adjust the level of the center speaker.
   Move the cursor to Center Level and press the CURSOR ◄ or ► button to adjust the level.
7. **Rear Level (See page 37)**
   Adjust the level of the rear speaker.
   Move the cursor to Rear Level and press the CURSOR ◄ or ► button to adjust the level.
8. **Delay Time (See page 38)**
   Move the cursor to Delay time and press the CURSOR ◄ or ► button to adjust the delay time.

NOTE:
The parameters differ depending on which surround mode is selected in step 3.
See pages 35 – 40 for more details on setting each surround parameter.

Setting the surround parameters







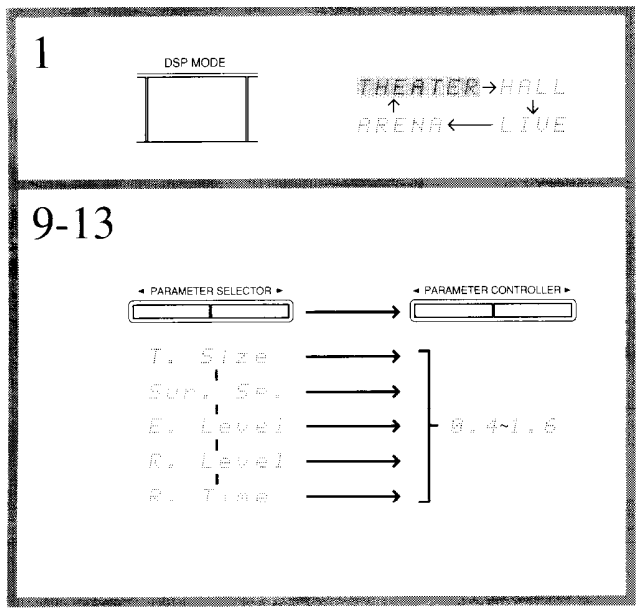
Refer to page 32 for basic operation of surround play.
Refer to page 36 - 40 and the explanation of each parameter when using on screen to set the parameters.
If you need to initialize the set value for each parameter, carry out the initialization procedure. (See page 38.)
The surround mode parameters can be set and stored for each source.

Setting the Dolby Pro Logic surround parameters

When using video cassette tapes or video discs with the Dolby Surround trademark, you can achieve the same kind of sound in your room that can be experienced in a movie theater.

1. **Select a source encoded with Dolby surround.**
2. **Press the DOLBY PRO LOGIC button.**
   Using remote control, press the SURROUND MODE button to select the Dolby Pro Logic surround mode.
- In the following procedure, select the parameter using the ◄ and ► PARAMETER SELECTOR buttons and set the parameters using the PARAMETER CONTROLLER buttons.

3. **Use the ◄ and ► PARAMETER SELECTOR buttons to select Center Mode. (Explanation 1: page 36)**
   Use the ◄ and ► PARAMETER CONTROLLER buttons to select either NORMAL, WIDEBAND or PHANTOM.
4. **Use the MASTER VOLUME to set the volume to the desired listening position.**
5. **Press the TEST button on the remote control to turn the test tone on. (Explanation 2, page 37)**
6. **Adjust the center level, and rear level. (Explanation 2, page 37)**
   Use the ▲ or ▼ CENTER (REAR) LEVEL buttons on the remote control to adjust the levels.
7. **Press the TEST button again Turn off the test tone.**
8. **Adjust the delay time.**



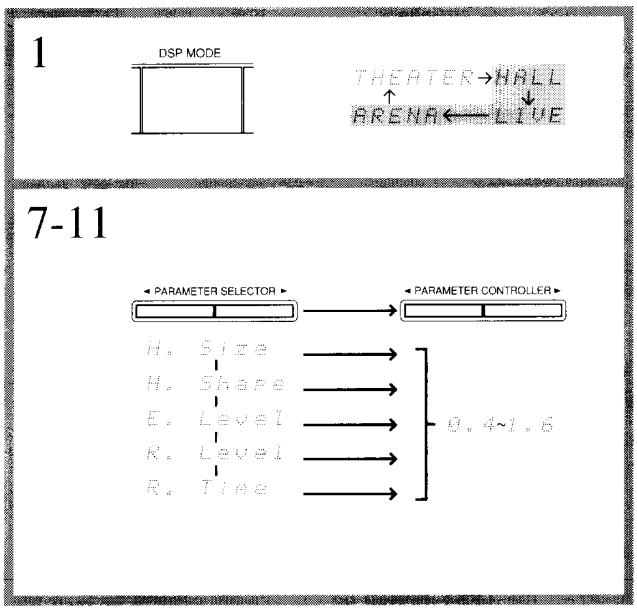
Setting the Theater surround parameters

You can achieve the same kind of sound in your room that you experience in a movie theater by adding a DSP sound field effect. (refer to page 5 for details)

1. Use the DSP MODE button to select Theater.

- Each time the DSP button is pressed the mode changes.
- If the center mode was selected while in another surround mode, there is no need to change it.
- Perform Steps 3 through 8 of the procedure entitled "Setting the Dolby Pro Logic surround parameters."

9. Select Theater size. (Explanation 5, page 38)
10. Adjust the Surround speakers. (Explanation 6, page 39)
11. Adjust the effect level. (Explanation 7, page 39)
12. Adjust the Reverb level.(Explanation 7, page 39)
13. Adjust the Reverb time. (Explanation 7, page 39)

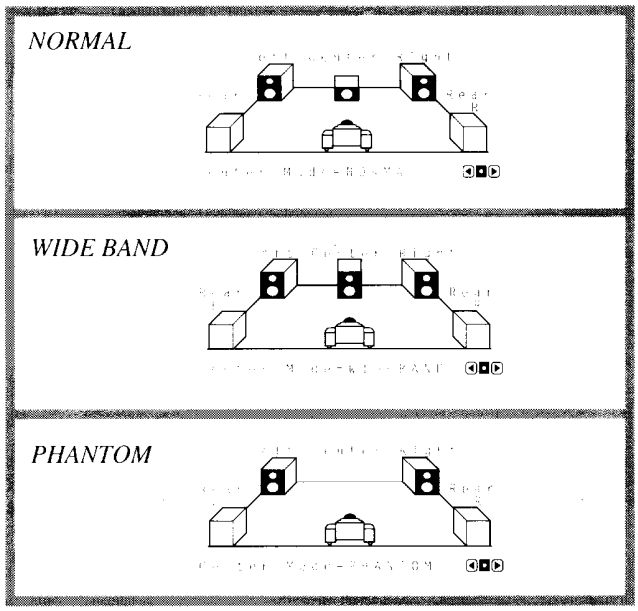


Setting the Hall, Live and Arena Surround parameters

1. Use the DSP MODE button to select either Hall, Live or Arena.

- If the center mode was selected while in another surround mode, there is no need to change it.
- Perform Steps 3, 4 and 6 of the procedure entitled "Setting the Dolby Pro Logic surround parameters."
- The test tone function is not provided with these surround mode.

7. Select Hall size. (Explanation 5, page 38)
8. Select Hall shape. (Explanation 6, page 39)
9. Adjust the effect level. (Explanation 7, page 39)
10. Adjust the reverb level. (Explanation 7, page 39)
11. Adjust the reverb time. (Explanation 7, page 39)



Explanation 1: Center mode

Because of the center speaker plays such an important part in Dolby Pro Logic Surround, three different modes are available for it, depending on its size.

On screen

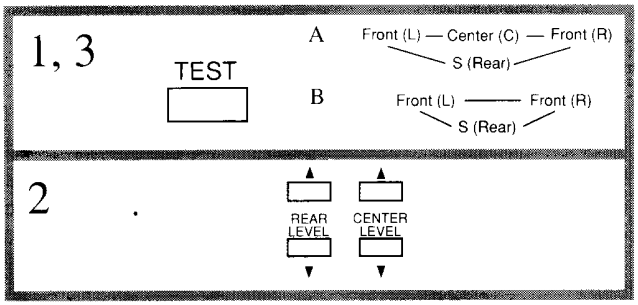
Move the cursor to Center Mode and press the CURSOR ◄ **or** ► buttons to select center mode. (See page 34)

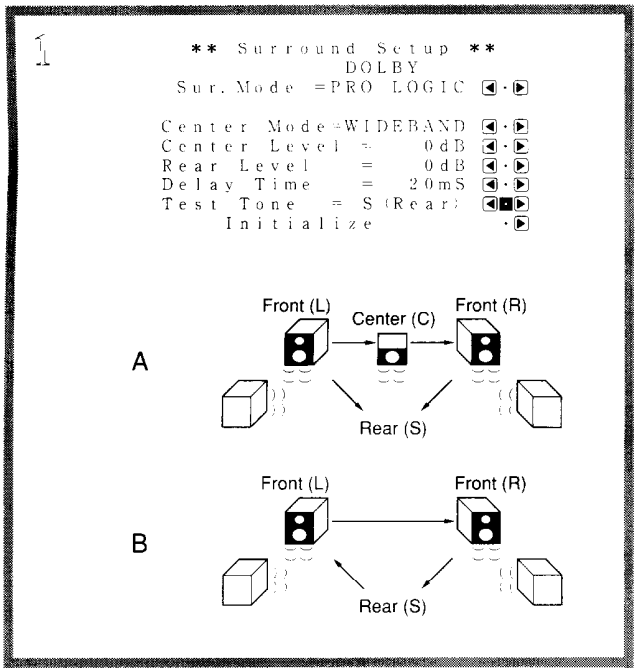
- When you have finished center mode setting, press the ENTER/ESCAPE button or the ▲ or ▼ CURSOR buttons.
- The center mode cannot be set independently for each surround mode, so the settings you make hear will affect every surround mode.

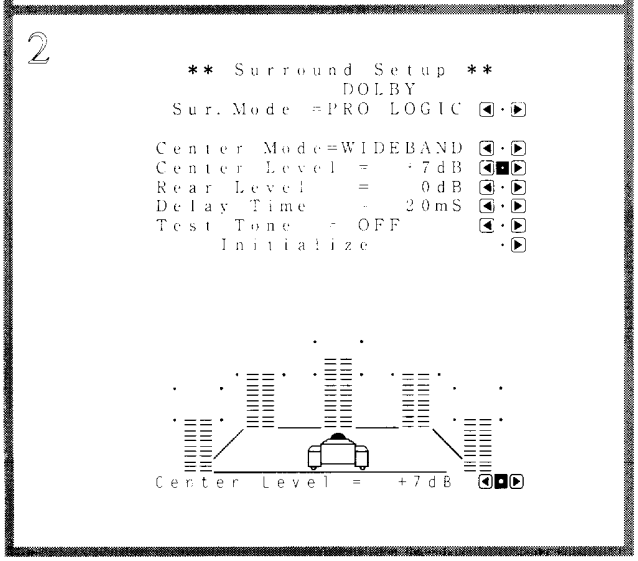
NORMAL: Use this setting when using a center speaker smaller than the L and R stereo speakers. The center speaker will not be sent frequencies below 100 Hz, and these will be split between the front L and R speakers.

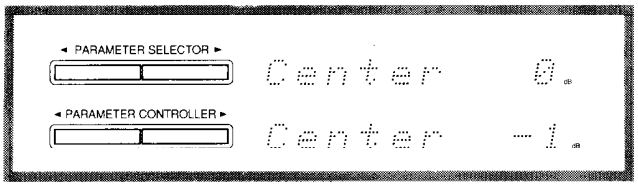
WIDEBAND: Use this setting when using a center speaker similar to the L and R stereo speakers in size and power. The center speaker will receive the full frequency range.

PHANTOM: Use this setting when a center speaker is not present. The sound that would have been sent to the center speaker will not be split between the front L and R speakers, producing a similar result.









Explanation 2: Adjusting the rear and center level using the test tone function

No matter what kind of program sources are used, the front, rear and center speakers should be set to the same volume level for the surround effect to work effectively. The test tone is provided to help make this adjustment. Pink noise is produced by each speaker in turn so you can match the volume level of the front, center and rear speakers. As the relative volumes of the speakers depend on your listening position, we recommended you make this adjustment with the remote control from the position you usually listen from.

Remote control

1. **Press the TEST button.**
- Pink noise is produced by each speaker in turn (Refer to the diagrams for the speaker order).

A. When the center mode is set to NORMAL or WIDEBAND

B. When the center mode is set to PHANTOM

2. **From your listening position, adjust the relative volume of the test tone from the different speakers.**
- Set the front, rear and center speakers to the same volume.

3. **Press the TEST button once more to turn off the test tone sequence.**

The test tone will automatically turn itself off after 2 minutes.

On screen

1. **Move the cursor to Test Tone and press the ◄ or ► CURSOR button to choose the type of test tone.**

→OFF ↔Left ↔ Center ↔ Right ↔ S(Rear) ↔ AUTO ←

- AUTO..... A test tone is sent to all speakers in turn.
- S(Rear), Left, Center, Right..... A test tone is only sent to the selected speaker.
- Off..... The test tone is not turned on.

A. When the center mode is set to NORMAL or WIDEBAND

B. When the center mode is set to PHANTOM

2. **Move the cursor to Center Level (Rear level) and use the ◄ and ► buttons to adjust the center (rear level).**
3. **Press the ENTER/ESCAPE button or the ▲ or ▼ cursor buttons to return to the Surround Setup screen.**

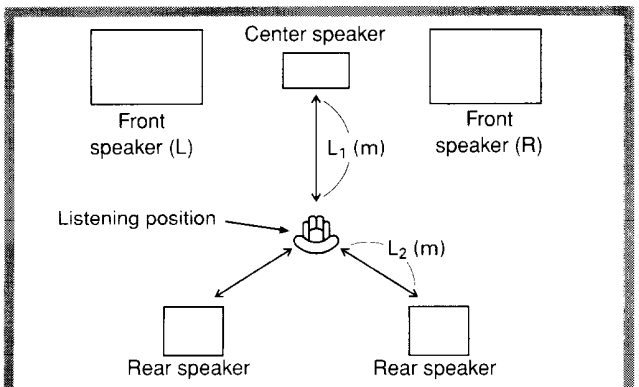
Main unit (adjust the centre and rear level)

1. **Use the ◄ and ► PARAMETER SELECTOR buttons to select items.**
- The selected item is displayed, the letters scroll and the current value will be displayed 5 seconds.

2. **Press the ◄ and ► PARAMETER CONTROLLER buttons to adjust the level.**

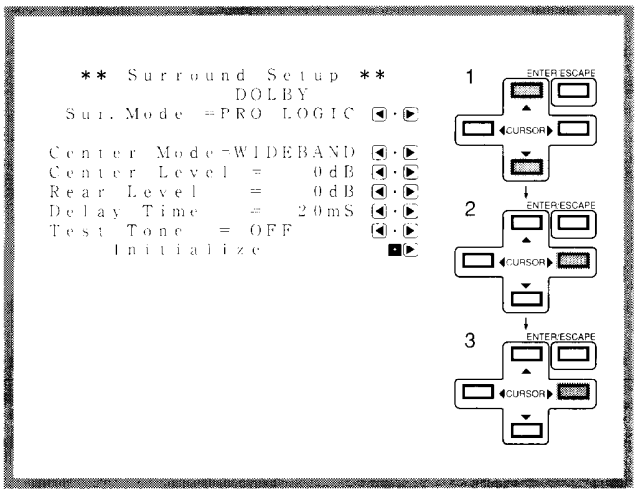
Note:

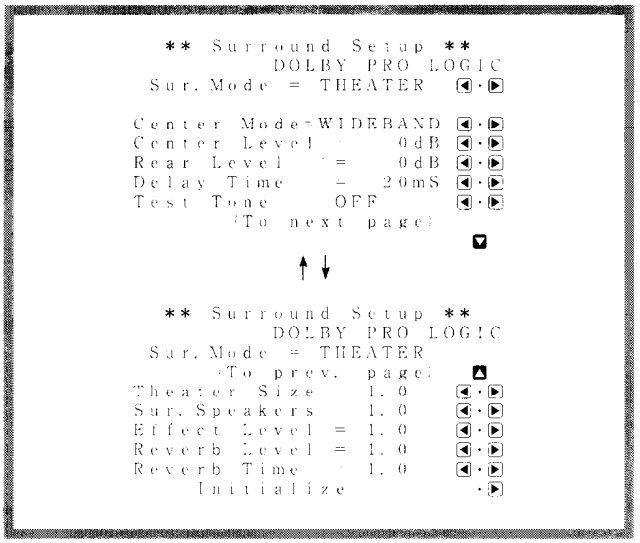
- The adjustment can be made from –∞ dB (minimum) –60, –40, –30, –25, –20, –18, ...–12, ...0, +1, +2, ...up to +12 dB (maximum).
- When the center mode is set to PHANTOM, you cannot adjust the center level here.
- When the test tone is on, if you press any button on the main unit or the remote control other than MASTER VOLUME, CENTER LEVEL, REAR LEVEL, SPEAKERS MAIN, DIMMERor MUTING, the test tone will turn off.



To calculate optimum setting for your room, measure the distances L1 and L2 as shown above, then work out the delay times form the following table.

L1-L2=1:15 to 23 msec	L1-L2=4:22 to 30 msec
L1-L2=2:16 to 26 msec	L1-L2=5:25 to 30 msec
L1-L2=3:19 to 29 msec	





Explanation 3: Delay time

By adjusting the delay time, and carefully adjusting master volume level, center volume level, rear volume level, the apparent acoustic size of your listening room can be enlarged or reduced. Adjustable delay time allows you to tailor the accoustic size of your listening enviroment to the sonic characteristics of the audio program, because a short delay in the audio signal coming from the rear speakers gives the impression that it had to travel a longer distance to reach the listener, hence a larger room or hall. Dolby Surround delay time is specified at 20 msec. It is recommended that initial Dolby Surround delay be set at 20 msec, but adjustment from 15 to 30 msec is possible.

Remote control

Press the DELAY TIME button.

- The current set value, DELAY 20 msec for example, is shown for 3 second on the display.

The value is increased each time the DELAY TIME button is pressed.

On screen

1. **Move the cursor to Delay Time and use the ◄ or ► cursor buttons to adjust the delay time.**
2. **Press the ENTER/ESCAPE button or the ▲ or ▼ cursor buttons to return to the Surround Setup screen.**

Main unit

1. **Use the ◄ and ► PARAMETER SELECTOR buttons to select Delay time.**
2. **Use the ◄ and ► PARAMETER CONTROLLER buttons to adjust the delay time.**

- The adjustment can be made from 15 -16 ------29 - 30 msec.

Explanation 4: Initialization

1. **Move the cursor to Initialize.**
2. **Press the ► cursor button.**
   Yes and No is displayed.
3. **Press the ◄ cursor button to initialize the system.**
   When initialization is carried out, each level is initialized as follows.
   Center level = 0 dB
   Rear level = 0 dB
   Delay Time = 20 msec
   Theater Size = 1.0
   Surround Speakers = 1.0
   Reverb level = 1.0
   Reverb Time = 1.0
   Effect Level = 1.0
   Hall Size = 1.0
   Hall Shape = 1.0.

Explanation 5: Theater size, Hall size

Theater mode simulates the atmosphere of a small or a large sized movie theater. Seven theater size can be selected, from 0.4 to 1.6. This figure gives the ratio of breadth to length.

On screen

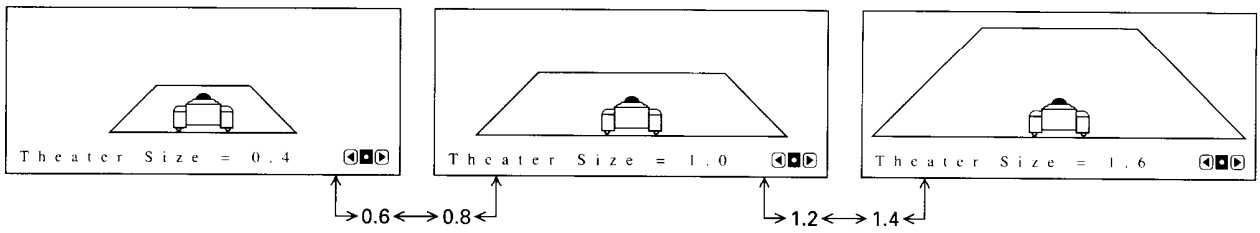
When selecting the Theater, Hall, Live or Arena Surround mode, The complete contents cannot be displayed on screen at one time. Position the cursor on To next page (To prev. page), to automatically transfer to the next (or previous) page.

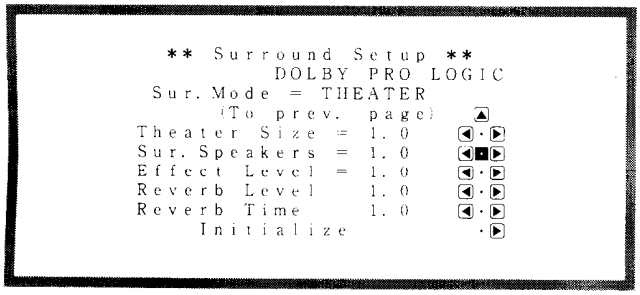
Move the cursor to Theater size and use the ◄ and ► CURSOR buttons to alter theater size.

Main unit

1. **Use the ◄ and ► PARAMETER SELECTOR buttons to select Theater size.**
2. **Use the ◄ and ► PARAMETER CONTROLLER buttons to alter the theater size.**

- When using the Hall, Live and Arena surround modes, set the Hall size in the same manner used to set the Theater size.





Explanation 6: Surround speakers

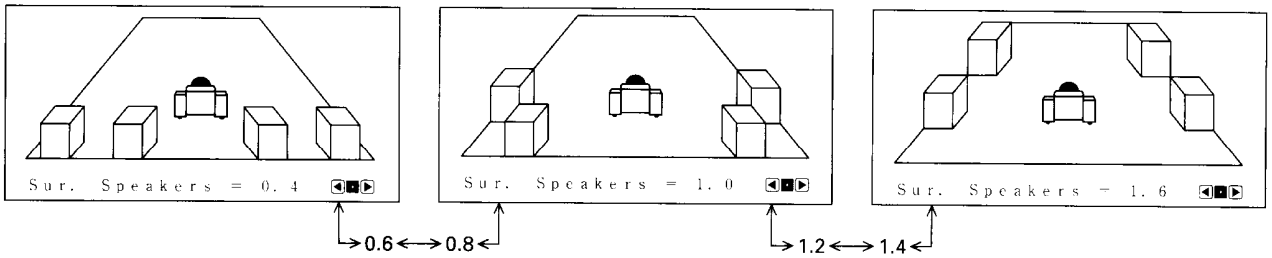
Simulate as if there were four Surround speakers. 7 patterns from 0.4 to 1.6 can be selected. The surround speakers mentioned here are refered to as Surround speakers in the movie theater, not the speakers connected to the main unit. The effects may differ according to the type of left and right surround rear speakers used and their positions.

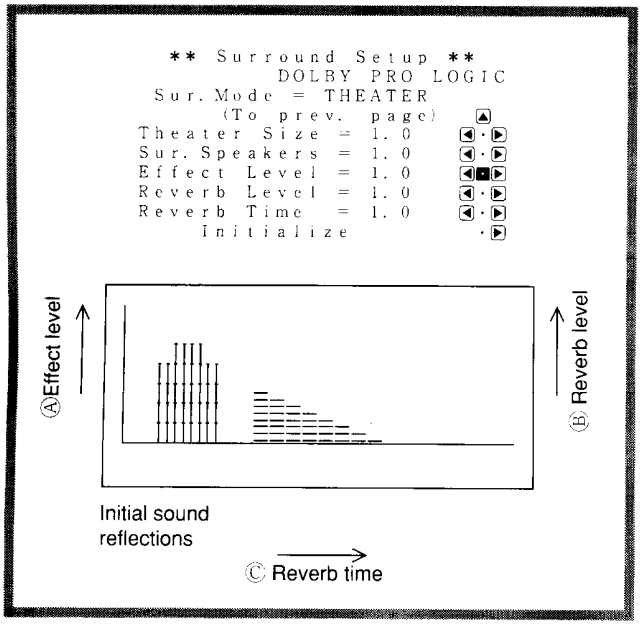
On screen

Move the cursor on Surround Speakers and use the ◄ and ► CURSOR buttons to select surround speakers.

Main unit

1. **Use the ◄ and ► PARAMETER SELECTOR buttons to select Surround speaker.**
2. Select the type of surround speakers using the ◄ and ► PARAMETER CONTROLLER buttons.





Explanation 7: Effect level, Reverb level and Reverb time

By adjusting the level of the initial reflections and reverbration in sound from a recording, it is possible to create the illusion of actually being in a concert hall or movie theater without leaving your living room. By adjusting the effect level, reverb level and reverb time, it is possible to recreate the sonic environment of a concert hall or movie theater.

For each parameter, you can set one of the seven levels between 0.4 and 1.6.

On screen

Move the cursor to Effect level (Reverb Level, Reverb Time) and use the ◄ and ►CURSOR buttons to adjust the level.

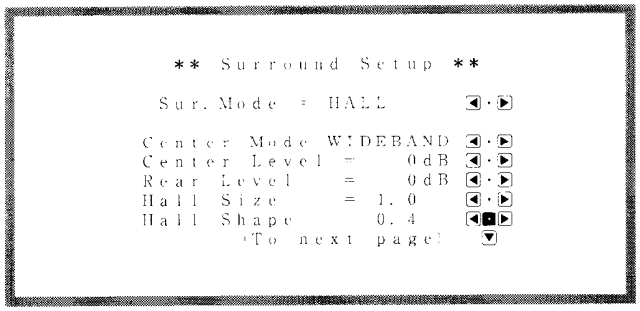
Main unit

1. **Use the ◄ and ► PARAMETER SELECTOR buttons to select Effect level (Reverb Level, Reverb Time).**
2. **Use the ◄ and ► PARAMETER CONTROLLER buttons to adjust the level.**

A. Effect level: This parameter adjust the initial reflection level.

B. Reverb level: This parameter adjust the level of only the reverb (not the initial reflections). Raising the level makes the mountain higher. (Refer to the illustration.)

C. Reverb Time: This parameter adjust the time taken for the reverberation to decay completely. Lenghtening the reverb time widens the base of the mountain.



Explanation 8: Hall shape

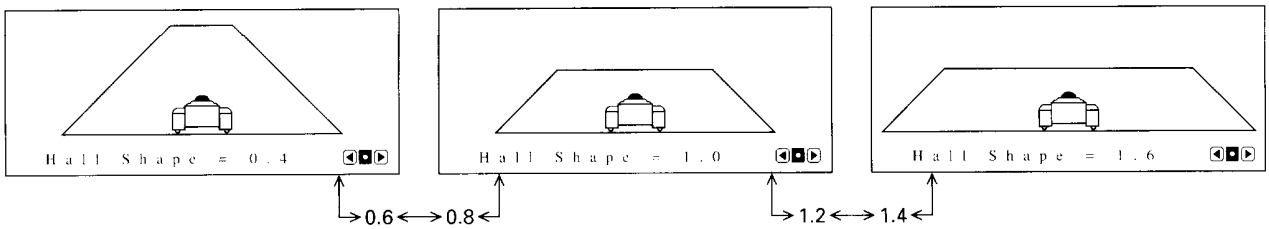
Simulates the shape of the concert hall. Seven Hall shape can be selected, from 0.4 to 1.6, 0.4 to 0.8 simulates rectangular shapes, 1.0 simulates a square shape and 1.2 to 1.6 simulate oblong shapes. The number is the ratio of hall breadth to length.

On screen

Move the cursor on Hall Shape and use the ◄ and ► CURSOR buttons to select the value.

Main unit

1. **Use the ◄ and ► PARAMETER SELECTOR buttons to select Hall Shape.**
2. **Use the ◄ and ► PARAMETER CONTROLLER buttons to alter the hall shape.**



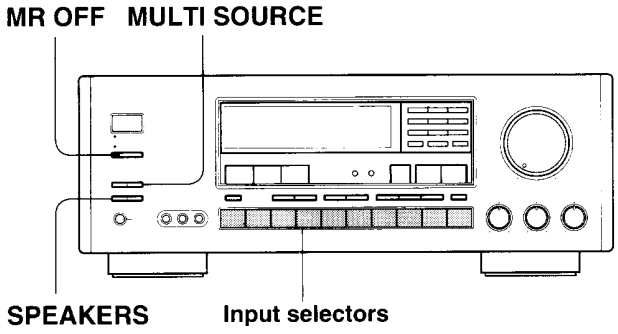
Listening to devices connected to the TX-SV727/R in another room

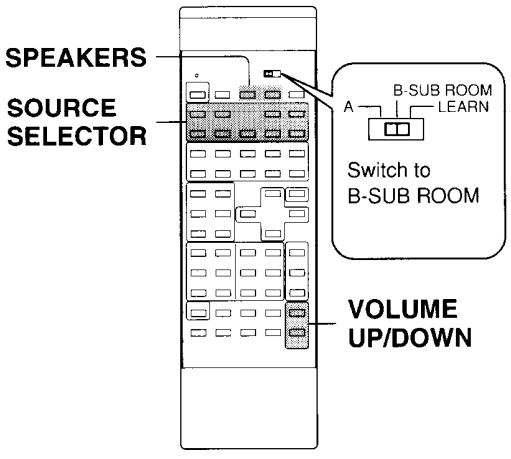
The TX-SV727/R allows you to listen to the desired performance in another room (sub room) while listening to the playback of a device located in the main room. To do this, connect the speakers in another room to the Front SPEAKERS REMOTE terminals on the TX-SV727/R.

Remote control from another room can be done by employing the Multiple Room Remote System (MRX). Refer to the connections for Multiple Room Remote Control. Be sure to operate the remote control pointing it at the Remote Sensor. (See page 16, 17)

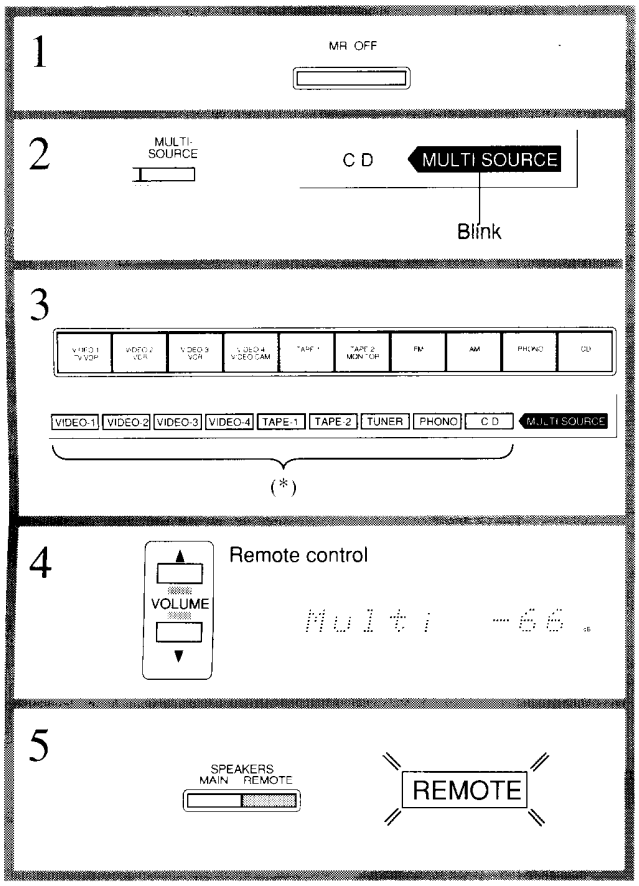
The following steps (except step1) can be performed using the remote control. It is recommended that the adjustments described below be done in the main room in advance, since it is not possible to operate the remote control in another room while watching the display of the TX-SV727/R.

Make sure that recording is not being carried out before performing the following operations.





The buttons with the blue characters, and the lower buttons on the remote control are used when the switch is in the B-SUB ROOM position. Please set the A / B-SUB ROOM / LEARN selector switch to the B-SUB ROOM position when using the remote control in the another room.



1. **Turn the MR OFF button off.**
- MR OFF indicator is turned off.
2. **Press the MULTI SOURCE button.**
3. **While the MULTI SOURCE indicator is flashing, use the Input Selector button to select the desired source.**
   The chosen source will be displayed in a red box. (*)
- If the tuner is selected with MULTI SOURCE and the Input Selector is set to something other than TUNER, the tuners frequency and group displays will be shown for 3 seconds.
- When changing the source, be sure to press the MULTI SOURCE button before pressing the Input Selector button. Pressing the Input Selector button without first pressing the MULTI SOURCE button will change the source in the main room.
- The remote control can be used to combine steps 2 and 3 by first positioning the A/B-SUB ROOM/LEARN selector switch to the B-SUB ROOM position and pressing the SOURCE SELECTOR button.
4. **Adjust the level using the VOLUME ▲/▼ buttons on the remote control.**
- MULTI and the level will be indicated on the display. It is recommended that the level be set lower in advance in the main room (about – 66 dB).
- Note that before adjusting the level using the VOLUME ▲/▼ buttons, set the selector switch on the remote control to the B-SUB ROOM position. If the position is set to A, the MASTER VOLUME affects the speaker volume in the main room, not the sub room.
5. **Press the SPEAKERS REMOTE button to illuminate the REMOTE indicator.**
- Press the MAIN button to turn off the MAIN indicator if you are not listening to the sound in the main room.

MR off button (MR OFF) and indicator

Use this button for tape recording or for the Surround sound modes. It is used to disable control of the MRX system via the remote control in another room. Pressing this button will illuminate the indicator, and control from another room will be disabled. Pressing the button again will turn the indicator off, and control from the other room will be enabled.

NOTES:
- The Surround becomes BY-PASS when the multi-source is used.
- The source indicated by the Input Selector will be output from the TAPE-1 and 2, and VIDEO-2 and 3 REC OUT terminals.
- Pressing the REC OUT button will turn off the Remote speakers.
- If the multi source is selected, MR OFF will automatically be deactivated.
- If the multi source is selected for REC OUT, or the SURROUND MODE button is pressed, MR OFF will automatically be activated.

Using the remote control

You can use the remote control supplied with this Tuner Amplifier to operate the source devices selected for the multi-source if they are an ONKYO CD or cassette deck bearing the RI mark.
If you require a second remote control for the sub room, there is a remote control RC-MR 1H for the sub room, which is sold separately.
Installation of the Remote Sensor and the Remote Emitter is required to control non-ONKYO devices from another room (sub room). Operate the remote control included with the device by directing the remote control toward the remote sensor installed in the sub room.
If a problem occurs, carry out the same operation on this unit's Front panel controls to verify that the problem is with the remote control.
If there is no problem when operating this unit directly, check the batteries in the remote control first before assuming that there is a controller malfunction.

NOTES:
- If remote control operations are done in another room, the source on the Input Selector may change, or any recording being done on this unit may be interrupted.
  Press the MR OFF button to disable control from another room. (The MR OFF indicator will be illuminated.)
- Some non-ONKYO remote controls cannot be used.

Trouble shooting guide

If a problem occurs, first operate the unit using the Front panel controls to confirm that it is not due to a malfunction (or worn out batteries) of the remote control.

Trouble	Cause	Remedy
No power.	• Power cord is disconnected. • There is external noise in the computer circuits of the TX-SV727/R. • AC fuse blown.	• Connect power cord. • Turn the power button off and then on again or remove the AC plug from the outlet. • Contact your ONKYO Service Center.
Power but no sound.	• TAPE-2 monitor switch is on. • Audio muting switch is on. • Bad/incorrect connections. • Amplifier protection circuitry has been activated. ('PROTECT' will be displayed.)	• Switch to off. • Switch to off with the remote control. • Check input leads, speaker leads, pin plugs, etc. • Contact your ONKYO Service Center.
No sound from the Center speaker, or very minimal sound.	• The speaker cables are connected to the DUAL terminals even though there is only 1 Center speaker. • Speaker cord is removed. • Surround mode is set to HALL, LIVE, ARENA and BY-PASS. • Center level is set to the minimum. • Center Mode is set to PHANTOM.	• Connect the speaker cables to the SINGLE terminals. • Check the connection between the amplifier and the speaker. • When HALL, LIVE or ARENA is selected for the Surround mode, only effect sound will be output from the Center speaker. The sound level will be less compared to the sound level when the DOLBY PRO LOGIC or THEATER is selected. • When the Surround mode is set to BY-PASS, no sound will output from the Center speaker. • Set the Center level to the appropriate volume . • Set Center Mode to NORMAL or WIDEBAND.
Hum, low-frequency noise.	• Poor or no input ground. • Poor or no phono motor ground. • The placement of the input/output cables on the Rear panel is incorrect.	• Check outer conductor of input plugs. • Check for proper ground connection. • Adjust the placement of the cable to reduce hum.
Howling when the volume is turned up.	• Turntable and speakers are too close together.	• Move them farther apart.
Rough or scratchy sound. High range is not clear.	• Stylus of pick-up is worn. • Stylus tip is dirty. • Treble control too high.	• Replace. • Clean. • Turn treble control down.
AM stations cannot be received.	• AM loop antenna is not attached.	• Connect the included AM loop antenna to the AM antenna terminals.
Buzzing noise on AM (particularly conspicuous at night or with weak stations).	• Noise from electrical apparatus such as fluorescent lamp.	• Move the AM loop antenna to different position. • Set up an outdoor AM antenna.
High-pitched noise or buzzing noise on AM.	• Noise from TV set.	• Place the AM loop antenna as far as possible from the TV. • Move unit away from TV set.
Crackling noise on AM, FM.	• Noise caused by turning fluorescent lamp on and off. • Noise from automobile ignition.	• Move antenna as far as possible from the fluorescent lamp. • Install an FM outdoor antenna as far as possible from the road. • Change the position or direction of the outdoor antenna.
FM tuned and stereo indicators light but sound is distorted and stereo separation is bad.	• Station is too strong. • Multiple reflection of the radio waves because of tall buildings or mountains.	• Change to T-shaped antenna. • Use antenna which has better directivity and select a point where the distortion is least.
FM tuned Indicators and STEREO indicator flicker and hiss is heard on FM.	• Station is too weak. • Stereo FM broadcasts cover only about half the distance of an ordinary broadcast.	• Install an outdoor FM antenna. • Change the position or direction of the outdoor antenna.
No station is recalled when a preset key is pressed.	• The power cord has been unplugged for a long time.	• The memory contents are lost. Store all stations again.
The Multiple Room Remote System does not operate.	• Connection is wrong. • The MR OFF button on the TX-SV727/R is engaged. (The MR OFF indicator will be lit.)	• Check the connection again. • Press the MR OFF button. (The MR OFF indicator will be turned off.)
Front panel controls function but remote control does not.	• No batteries in remote control. • Batteries have worn out.	• Insert batteries. • Replace batteries.
Also refer to the respective instruction manuals of the Video Disc Player, video cassette recorder, TV monitor, etc., being used.		

NOTE:
The tuning steps by which the tuned frequency changes on each band have been set at the factory to the proper value for the country where each unit is to be sold. If you use the unit in a country where a different tuning step is required or if the broadcast frequencies in your country change so that you can not tune in radio stations precisely, contact your authorized ONKYO Service Center.

This device employs a microcomputer to perform various functions and operations. If interference generated by an external power supply, radio waves, or other electrical source results in an accident which causes the specified operations and functions to operate abnormally. To perform a reset, please follow the procedure below.

1. Press and hold down the VIDEO-1 button, then press the POWER button.
2. After "clear" is displayed, the preset memory and parameters stored in the memory, such as surround, are initialized and will return to the factory settings.

Problem with the RC-288M remote control

If the remote control does not operate,	• First, try operations using the buttons of the main unit for each function. If operation is not possible, the fault is in the main unit and not the remote control. • If the batteries are weak, replace the batteries.
The buttons of this remote control cannot be memorized or some remote control functions cannot be memorized.	• This remote control uses an infrared ray system and most functions can be memorized. However, there may some instances where memorization is not possible or some remote control functions cannot be memorized due to the output method.
It is difficult to memorize functions using the buttons of this remote control, and even when a function has been memorized, operation is incorrect.	• The RC-288M is not aimed directly at the other remote control, or the distance between the two units is out of range. Confirm that these two factors are correct. • Confirm whether the batteries of your existing remote control are weak. (If the batteries are weak, it may be impossible to operate a function or to memorize functions. Insert new batteries and try again.) • The RC-288M remote control uses an infrared ray system and most functions can be memorized. However, there may be some instances where memorization is not possible or some remote control functions cannot be memorized due to the output method of the other remote control.
The functions of the television, video, etc., memorized into this remote control do not operate properly with the buttons.	• Make sure the functions memorized correspond to the characters or marks on the buttons. The functions will operate as memorized, without relation to the characters or marks on the button. • If the batteries are weak, it may be impossible to memorize functions. Insert the indicated type of batteries into your existing remote control and into this remote control, and try memorizing the code once again. (Make sure the new batteries are the correct type indicated for the equipment.)
If the operable distance of the RC-288M is shorter than that of the existing remote control, or if the reaction time of the machine is slow when using the RC-288M.	• The operable distance of this remote control and your existing remote control are different. In this case, it may happen that the operable distance is shortened. • Try memorizing once again, making sure you are memorizing at an appropriate distance. • Check that the batteries are not weak. • It may be simply that the correspondence between the unit and machine is slow.
The codes memorized by the button of RC-288M have been "forgotten".	• If the batteries are taken out of the unit for more than one hour, memorized codes will be lost. In this case, please memorize the codes once again.

Questions	Answers
Q : How do I get my remote speaker to turn on?	A : Hit multi-source button, select a source (CD, FM) then hit remote speaker button. On hand held remote, hit VOLUME ▲/▼ key to send volume to remote speakers. This is independent from the main volume.
Q : I cannot get On-screen graphics on my TV/ Monitor.	A : Make sure you have a single RCA video cable running from the monitor out on the back of the ONKYO going to the EXT. 1 or video-1 input of your TV/Monitor. You must make the input selection at the TV/Monitor. (Many customer assume that the ONKYO will switch the TV/Monitor mode automatically).
Q : How do I get just my TV sound through my stereo?	A : On the back of your TV/Monitor you should see AUDIO OUT LEFT and RIGHT RCA jacks. Run a standard RCA cable from those outputs to any line level input on the ONKYO. Do not use the Phono input.
Q : Why is there no sound coming from my unit? It worked fine yesterday and there is some music faintly in the background.	A : Check to see that the tape 2 monitor button is not engaged.

Specifications

AMPLIFIER SECTION

Power Output: Stereo mode

Front Main L/R channels
100 watts per channel min. RMS. at 8 ohms, both channels driven, from 20 Hz to 20,000 Hz, with no more than 0.08% total harmonic distortion.

Continuous power output:
2 × 120 W at 8ohms (DIN)

Surround mode and Multi source mode

Front Main L/R and center channels
80 W + 80 W + 80 W (1 kHz 0.08 % 8 ohms)
Rear channels (Rear only driven)
25 W + 25 W (1 kHz 0.8 % 8 ohms)
Remote channels
80 W + 80 W (1 kHz 0.1 % 8 ohms)

Total Harmonic Distortion: 0.08% at rated power (FRONT)
IM Distortion: 0.08% at rated power (FRONT)
Damping Factor: 60 at 8 ohms (FRONT)
Input Sensitivity and Impedance:

	Phono:	2.5 mV/50 kohms
	CD/Tape Play:	150 mV/50 kohms
Output level and impedance:	Tape Rec:	150 mV/2.2 kohms
	Pre out (FRONT):	1V/ 2.2 kohms
	(REAR/CENTER/MULTI SOURCE) :	1V/2.2 kohms
	(SUBWOOFER):	1V/2.2 kohms

Phono Overload: 120 mV RMS. at 1,000 Hz, 0.5% THD.
Frequency Response: 20 to 30,000 Hz, +/–1 dB
RIAA Deviation: 20 to 20,000 Hz, +/–0.8 dB
Tone Control: BASS: +/–10 dB at 100 Hz
TREBLE: +/–10 dB at 10,000 Hz
Signal to Noise Ratio: PHONO 80 dB (IHF A, 5 mV input)
CD/TAPE: 100 dB (IHF A)
Muting: – ∞ dB

VIDEO SECTION

Signal sensitivity and impedance: VDP/VCR input, output: 1 Vp-p, 75 ohms

TUNER SECTION

FM:

Tuning Range: 87.5 — 108.0 MHz (50 kHz steps)
Usable Sensitivity: Mono: 11.2 dBf, 1.0 µV (75 ohms) IHF
0.9µV (26 dB S/N, 40kHz Div.) 75 ohms DIN
Stereo: 17.2 dBf, 2.0 µV (75 ohms) IHF
23µV (46 dB S/N, 40kHz Div.) 75 ohms DIN
50dB Quieting Sensitivity: Mono: 17.2 dBf, 2.0 µV (75 ohms)
Stereo: 37.2 dBf, 20 µV (75 ohms)
Capture Ratio: 1.5 dB
Image Rejection Ratio: 40 dB (U.S.A. & Canadian models)
85 dB (European models)
IF Rejection Ratio: 90 dB
Signal-to-Noise Ratio: Mono: 73 dB
Stereo: 67 dB
Alternate Channel Attenuation: 55 dB
AM Suppression Ratio: 50 dB
Total Harmonic Distortion: Mono: 0.15%
Stereo: 0.25%
Frequency Response: 30 — 15,000 Hz +/–1.5 dB
Stereo Separation: 45 dB at 1 kHz
30 dB at 100 — 10,000 Hz

AM:

Tuning Range: USA & Canadian models
530 — 1710 kHz (10 kHz steps)
European models
522 — 1611 kHz (9 kHz steps)
Worldwide models
531 — 1602 kHz (9 kHz steps)
530 — 1710 kHz (10 kHz steps)
Usable Sensitivity: 30 µV
Image Rejection Ratio: 40 dB
IF Rejection Ratio: 40 dB
Signal-to-Noise Ratio: 40 dB
Total Harmonic Distortion: 0.7%

REMOTE CONTROL RC-288M

Transmitter: Infrared
Signal range: Approx. 5 meters (16ft.)
Power supply: Two AA batteries (1.5V × 2)

GENERAL

Power Supply: USA & Canadian models
AC120 V, 60 Hz
European and Australian models
AC230 V, 50 Hz
Worldwide models
120 and 220 V switchable, 50/60 Hz
Dimensions (W × H × D): 455 × 170 × 389 mm
17-15/16" × 6-11/16" × 15-5/16"
Mass: 13.0 kg (28.7 lbs)

Specifications and features are subject to change without notice.

ONKYO CORPORATION

ONKYO CORPORATION
Sales & Product Planning Div.: 2-1, Nisshin-cho, Neyagawa-shi, OSAKA 572, JAPAN
Tel: 0720-31-8111 Fax: 0720-33-5222

ONKYO U.S.A CORPORATION
200 Williams Drive, Ramsey, N.J. 07446, U.S.A.
Tel: 201-825-7950 Fax: 201-825-8150

ONKYO DEUTSCHLAND GMBH ELECTRONICS
Industriestrasse 18-20, 82110 Germering, GERMANY
Tel: 089 84 93 20 Fax: 089 84 93 226

ONKYO FRANCE
Immeuble Le Diamant, Domaine Technologique de Saclay, 4 Rue René Razel,
91892 SACLAY, FRANCE Tel: (1) 69 33 14 00 Fax: (1) 69 41 35 84

SN 29342050AY

E
107960